

24535

COLORS & MARKINGS
OF

USAF AGGRESSOR SQUADRONS

C&M
VOL. 11
INCLUDES AIRCRAFT FROM THE
26th, 64th, 65th & 527th
AGGRESSOR SQUADRONS!



Bert Kinzey and Ray Leader

THE COLORS & MARKINGS SERIES

The Colors & Markings Series has been designed to provide an ongoing affordable series of publications covering the paint schemes, squadron markings, special insignias, and nose art carried by many of the most important aircraft in aviation history.

Most books in this series will have sixty-four pages, and approximately one-quarter of the pictures will usually be in color. When older aircraft are presented, and extensive color coverage is not available, there will be less color, but more black and white photographs. Except for the front cover, no artist paintings will be used to show color, since these are notorious for having errors. When color photographs are not available, captions for the black and white photos will extensively describe the colors involved. We believe this will provide more accurate information than artists' renditions. But in most cases, there will be approximately 50 color photographs for a price under twelve dollars. Additionally, there will usually be at least one-hundred more black and white photographs. We will make it our policy to keep the photographs large so that the markings show clearly. Dates that the photographs were taken will often be included so that the reader will know the time frame for which the markings were appropriate.

Special volumes in this series will be released approximately once a year. These special volumes will be larger and will contain additional color.

The service life of each aircraft will dictate the spe-

cific format of the book. In some cases the book may cover a specific time frame or a given numbered air force. The active Air Force units that operated the aircraft may be the focus of one book, while Air National Guard units will be featured in another. In short, the format and scope of each book will be narrowed so that good coverage can be presented. However, it must be noted that it is impossible to provide definitive, much less complete, coverage of a given aircraft in a sixty-four page book. To do so is not our goal, but we do intend to provide as extensive coverage as possible in a continuing softbound series, and offered at a price even the reader on a budget can afford. In order to include as many photographs as possible, no extensive narrative will be included to cover the developmental or operational history of the aircraft. This is usually better provided in books designed primarily to present such information. This series will have only a brief introduction to explain the basic mission of the aircraft and the scope and format used for that particular book. It will be the captions for the photographs that will tell the story of the aircraft and its markings. To as great an extent as possible, photos that have not been published before will be used.

We have been fortunate to receive the cooperation and assistance from some of the best known aviation photographers in the world who have offered photos from their extensive collections for this series. With their help, we believe the Colors & Markings Series will be the best of its kind available anywhere.

THE AUTHORS

Bert Kinzey is an aviation writer who is best known for his "Detail & Scale" series which he created to cover the details of military aircraft. He has also written numerous magazine articles as well as manuals for the Department of the Army. He has served in the Army as an Air Defense Artillery Officer, during which time he commanded a Hawk guided missile battery in Korea, and later wrote and taught classes on airpower at the Army Air Defense School. As a civilian he served with the Army as a "subject matter expert" on the Soviet air threat, but now has turned his attention to full time writing. He is an avid aviation photographer and modeler, and is a member of the Aviation and Space Writers Association, the International Plastic Modelers Society, and the American Historical Society. He is also President of Detail & Scale, Inc.

Ray Leader is an Air Traffic Controller for the Federal Aviation Administration at the Atlanta International Airport. He began his aviation career when he entered the U.S. Army in 1958. Ray's interest in aviation led him into aviation photography which he has avidly pursued since 1962. He has one of the most extensive collections of aviation photographs in the world. He is a member of the International Plastic Modeler's Society, the American Aviation Historical Society, and the World Airline Historical Society. Ray operates "Flightleader Aviation Research and Photography," and travels extensively taking photographs for Detail & Scale and other aviation publications. He is the Vice President for Photography at Detail & Scale, Inc.

COLORS & MARKINGS
OF

USAF AGGRESSOR SQUADRONS



Bert Kinzey and Ray Leader



TAB BOOKS Inc.

Blue Ridge Summit, PA

Airlife Publishing Ltd.

England

C&M
VOL. 11
INCLUDES AIRCRAFT FROM THE
26th, 64th, 65th & 527th
AGGRESSOR SQUADRONS!

COPYRIGHT © 1988 BY DETAIL & SCALE, INC.

All rights reserved. No part of this publication may be reproduced in any form, stored in a retrieval system or transmitted by any means, electronic, mechanical, or otherwise, except in a review, without the written consent of Detail & Scale, Inc.

This book is a product of Detail & Scale, Inc., which has sole responsibility for its content and layout, except that all contributors are responsible for the security clearance and copyright release of all materials submitted. Published and distributed in the United States by TAB BOOKS Inc., and in Great Britain and Europe by Airline Publishing LTD.

CONTRIBUTORS:

Flightleader	Ted Van Geffen/I.A.A.P.	Tom Brewer
Marty Isham	Jerry Geer	Jim Rotramel
Don Logan	Wayne Whited	William Spidle
Mike Campbell	can sau	Brian Rogers
Craig Kaston	Steve Daniels	Dick Cole
Military Aircraft Photographs	Andre Wilderdijk	Peter Zastrow
Freek Van Balen	Peter Thompson	Don Linn
H. Van Broekhuizen	Chuck Stewart Jr.	Peter Greve
Kirk Minert	Donald McGarry	Gary Meinert
Don Jay	Ian MacPherson	Mike Grove

FIRST EDITION FIRST PRINTING

Published in United States by

TAB BOOKS Inc.
Blue Ridge Summit, PA 17294-0214

Library of Congress Cataloging
in Publication Data

Kinzey, Bert.
USAF aggressor squadrons / by Bert Kinzey and
Ray Leader.
p. cm.—(Colors & markings ; vol. 11)
ISBN 0-8306-8535-9 (pbk.)
1. Fighter planes—United States—Identification
marks. 2. F-5
(Jet fighter plane) 3. F-16 (Fighter planes) 4.
Fighter plane
combat—Study and teaching—United States. I.
Leader, Ray.
II. Title. III. Title: Aggressor squadrons. IV. Se-
ries: C & M:
vol. 11.
UG1243.K495 1988

First published in Great Britain in 1988
by Airline Publishing Ltd.
7 St. John's Hill, Shrewsbury, SY1 1JE

British Library Cataloging In
Publication Data

Kinzey, Bert, 1945-
US Air Force Aggressor squadrons. —
(Colours & markings series ; V.11)
1. United States. Air Force. Military
aircraft. Camouflage & markings —
1926-
I. Title II. Leader, Ray III. Series
358.4'183
ISBN 1-85310-611-9

Questions regarding the content of this book
should be addressed to:

Reader Inquiry Branch
TAB BOOKS Inc.
Blue Ridge Summit, PA 17294-0214

Front cover: Six aggressor F-5Es from Nellis AFB and the 57th FWW are pictured flying over Lake Meade. Patterns used on the upper surfaces of the aircraft are shown for six of the aggressor schemes. On the point is the 57th FWW commander's aircraft, and it is painted in the Blue scheme. It is followed in trail by an aircraft in the Pumpkin scheme. On the left wing of the lead aircraft is an F-5E in the Snake scheme, and the aircraft on the far left is in the Silver scheme. The black walkways are visible on its wing. To the leader's right is an aircraft in the Old Lizard scheme, and the aircraft at far right appears to be painted in the colors used for the Old Ghost scheme, but the pattern does not match that shown in the official drawings. (USAF via Isham)

Rear cover: The patches of the U.S. Air Force's four aggressor squadrons are pictured on the rear cover.

INTRODUCTION



The commander of the 57th Fighter Weapons Wing has a specially marked F-5E painted in aggressor colors. Colonel Chuck Cunningham (later promoted to Brigadier General) was the commander of the 57th FWW when this photograph was taken. The aircraft is in the Old Blue scheme with a stylized tail number emphasizing the 57, and has a 57 nose number. More photographs of the 57th FWW commander's aircraft can be found on page 53. (Cole)

"The best training device in the Air Force." That is the way the U.S. Air Force's aggressor squadrons have been described by the pilots that fly against them in realistic air-to-air combat. An important lesson learned in the skies over Vietnam was that our fighter pilots were lacking in dogfighting skills that were important to survival when it came to combat with the supposedly less capable MiGs. It was thought that American fighters, armed with sophisticated missiles that were guided to their targets by infrared seekers or radar, would engage targets at such a long range that air combat maneuvering would become a thing of the past. It was this same reasoning that had resulted in the F-4 Phantom being designed and initially built without any internal gun armament. Fighters were not going to get close enough to each other to fight with guns anymore.

The folly of this thinking was clearly demonstrated in Vietnam. Time and again, pilots had close-in gun shots at an adversary, but had no gun to make the kill. Being too close to fire a missile, the pilot was at a disadvantage rather than an advantage, and this resulted in the later F-4E version of the Phantom being fitted with an internal cannon. Newer fighters, like the F-14, F-15, F-16, and F-18, have all been designed with an internal cannon from the beginning. It is difficult for some people to see that no matter how sophisticated you may get, you still cannot get away from basics.

But it was a kill ratio that sank almost to an even

one-for-one that also prompted both the Navy and the Air Force to begin training their fighter pilots in what became known as dissimilar air combat maneuvering or DACM. It was not a question of having F-4 drivers go out and practice fighting other F-4s from the same squadron. Instead, the opponents were to be pilots trained to fly enemy tactics with aircraft that approximated enemy aircraft in size and performance.

To meet this requirement, the Air Force formed four aggressor squadrons. Two were based at Nellis AFB, Nevada, one in Europe at Alconbury, England, and one in the Pacific at Clark AFB in the Philippines. The first aircraft chosen by the Air Force to be a MiG simulator was the T-38 Talon trainer. Its small size and performance was similar to the Soviet-built aircraft that were the real and potential adversaries to American fighter pilots in any theater in which they might have to fight. But the T-38s were replaced with the F-5E as soon as possible. Almost from the very start, these aircraft were painted in camouflage schemes that simulated those on known threat aircraft throughout the world. Soviet markings and nose numbers were used, but because of detente, the use of Soviet markings was not allowed by the politicians, and U.S. national insignia were, and still are, carried instead. In fact, there was a time when it was forbidden to use the word "threat" with specific reference to the Soviet Union. But again, more realistic minds prevailed, and now the Soviet aircraft can be referred to as threat aircraft. The Soviet Union blasted the aggressor squadrons in their

T-38A, 67-14842, was painted in the Ghost scheme and assigned to the 64th Aggressor Squadron when this photograph was taken in August 1975. The nose number was red, outlined in yellow. (Geer)



press as being harmful to peace and understanding between the superpowers, but now have similar units of their own.

Although the aggressor squadrons were not permitted to use Soviet markings, specifically the red star national insignia, the aircraft were painted in camouflage schemes that simulated those of potential adversaries, and the Soviet style nose numbers remained. The paint schemes were based on known schemes from the Soviet Bloc nations of the Warsaw Pact, Middle East countries, and those used by the Soviet Union itself. Names like Frog, Snake, Lizard, Ghost, Grape, Pumpkin, and Flogger were given to these schemes once they were applied to the aggressor aircraft. Unlike the Navy, the Air Force devised specific patterns and used specific paint colors for the majority of its aggressor schemes most of the time. In recent years there has been some considerable deviation from the official schemes, both in color and pattern, but there remains some specific guidelines for painting the aggressor aircraft. It is these schemes, and the markings used with them, that are the subject of this publication.

The scope of this book is limited to the four Air Force aggressor squadrons that are tasked with the mission of providing realistic DACM training for the Air Force, and often for the Navy, the Marines, and our allies as well. It is true that a number of other units in the Air Force have aircraft that are painted in the same or similar types of schemes, but these fall outside the scope of this publication. It is our purpose to show aggressor aircraft in aggressor schemes and markings while assigned to one of the four aggressor squadrons. In doing so, we have included fifty-one color photographs and many more black and white photos of the actual aircraft. These photographs are supplemented by official Air Force drawings and other drawings that have been made directly from Air Force drawings. Federal Standard numbers are given for paint colors where available, and paint mixes are provided in other cases. Color photographs are provided for both sides of every official aggressor scheme. Explanations are provided for the simpler schemes as well as for

those for which no official documentation exists.

As this book is written, dramatic changes are being planned for the Air Force's aggressor squadrons. Several changes have been announced recently, but these seem to remain in a state of flux at this writing. It seems almost certain that only one aggressor squadron will remain at Nellis AFB, and that the F-5E will soon be replaced with the F-16 as the aggressor aircraft. Because of budget restraints, it has even been proposed that the aggressor squadrons be disbanded. It is reasoned that they don't go to war, and what money the budget does allow must be spent on assets that will fight the wars when needed. But it is also necessary that the combat units be well trained to fight those wars, and there is no better way to conduct this training than in simulated but realistic DACM such as that provided by the aggressor squadrons. Hopefully, they will remain in existence as the important training asset that they are.

With changes of a considerable magnitude soon to be implemented, now is an appropriate time to take a look at the aggressor schemes that have been applied to the T-38 and the present F-5E aircraft used by these squadrons. Soon they will be a thing of the past as the F-16 replaces the F-5E as the primary threat simulator. On the pages that follow, we have tried to show as many of these schemes as completely as possible. This book is possible only because many photographers have provided photographs and other materials, and their names can be found on page two. A special thanks is due Lee Gerstacker, a former aggressor pilot, for his help, advice, time, and friendship. Lee arranged for Bert Kinzey to fly with the aggressors during a Red Flag mission in order to experience one part of the aggressor squadron's mission first hand. He also obtained much of the information on the paint schemes. Marty Isham should also be singled out for thanks. Marty obtained the latest information on paint schemes and mixes just prior to the press date for this book so that it would be as up-to-date as possible. But all of the contributors were important, and they provided valuable photographs and information. To all of them the authors express a sincere word of thanks.

USAF AGGRESSOR PAINT SCHEMES



Two F-5Es are shown taking off from the runway at Nellis AFB, Nevada, for a training mission. Each carries a training version of the Sidewinder missile on the right wing tip. Red nose numbers indicate the 64th AS, while blue nose numbers belong to the 65th AS. However, in practice, pilots from both squadrons fly any of the aircraft assigned to either unit. (Isham)

The first T-38s to be assigned to the U.S. Air Force's aggressor squadrons had just arrived when it was decided to paint them in camouflage schemes that were based on those used by the Soviet Union and other potential adversaries. Unlike the Navy, who had already become involved in its own similar program, the Air Force specified official colors and patterns for its aggressor schemes. The first of these included the schemes that were known as Grape, Snake, Lizard, and Ghost. Some T-38s were received in overall gray schemes, and were left gray while they performed their aggressor roles. Many of the T-38s also flew aggressor missions in the overall white scheme used by the Air Training Command that had previously owned them, but these were soon painted in one of the new aggressor schemes that had been developed.

When the F-5E began replacing the T-38As, they too were camouflaged with the same aggressor paint schemes, with three new schemes being added. Three of the aircraft were painted in the yellow and green Pumpkin scheme for which there were no "official" specifications. Others were received in, or subsequently painted, overall silver with an aluminized polyurethane topcoat. This became known as the Silver scheme. Additionally, some F-5Es that were received in the Southeast Asia (SEA) scheme, and were originally intended for the Vietnamese Air Force (VNAF), were left in that scheme. It was simply known as the VNAF or Gomer scheme.

The addition of more new schemes was directed by a letter dated February 27, 1980, from Colonel Charles J. Cunningham, Jr., who was then the commander of the 57th Tactical Training Wing. Colonel Cunningham was later promoted to Brigadier General, and the wing was renamed the 57th Fighter Weapons Wing. The letter added the Frog, Sand, and Blue schemes to those already used. The Grape scheme was not included, but continued to be used for some time. FS paint colors and patterns were included as attachments for each scheme. Specifications for the Pumpkin scheme were provided, but this was seldom followed. The three aircraft already in that scheme remained as they were. Because Colonel Cun-

ningham was promoted and reassigned before the directives of the letter could be fully carried out, it was not totally implemented. There is no record that the Frog scheme was ever applied to an aircraft, but photographs are included on page 26 that show an F-5E that appears to match the specifications provided for that scheme. Although all patterns included with this letter called for the aircraft to have undersides of solid colors, in practice, these schemes, as well as some of the older ones, were wrapped around the aircraft using unofficial patterns in many cases.

More recently, several new aggressor schemes have been added. All are wraparound patterns, and include the New Blue, Flogger, New Lizard, and New Ghost schemes. Each of these has official patterns and colors or mixes specified for them.

For many years the aggressor squadrons generally followed the official schemes that were designed for their aircraft. There was some deviation, and even when the patterns and colors were followed, some variation occurred simply because of the abilities or attention to detail paid to the specifications by the individuals who did the actual painting. But more recently, there has been a great deal more experimentation, and today, no two aggressor aircraft on the ramp at Nellis AFB look exactly alike. Even when official patterns are followed, the paint mixes are often considerably different than what is called for. In other cases, colors have been mixed and applied to aircraft in a pattern that does not follow any of the ones that have been officially specified. This has resulted in a fairly large number of aircraft in "bastard" schemes. We have used many of our color photographs to show these unusual colors and patterns that now adorn the aggressor aircraft.

Starting on the next page is a look at all of the official aggressor schemes showing color photographs of both sides of each scheme, except Gray and Silver, followed by drawings and FS colors for the schemes. Each of the four squadrons is then examined in individual sections that include not only the official schemes, but also the "unofficial" ones as well.

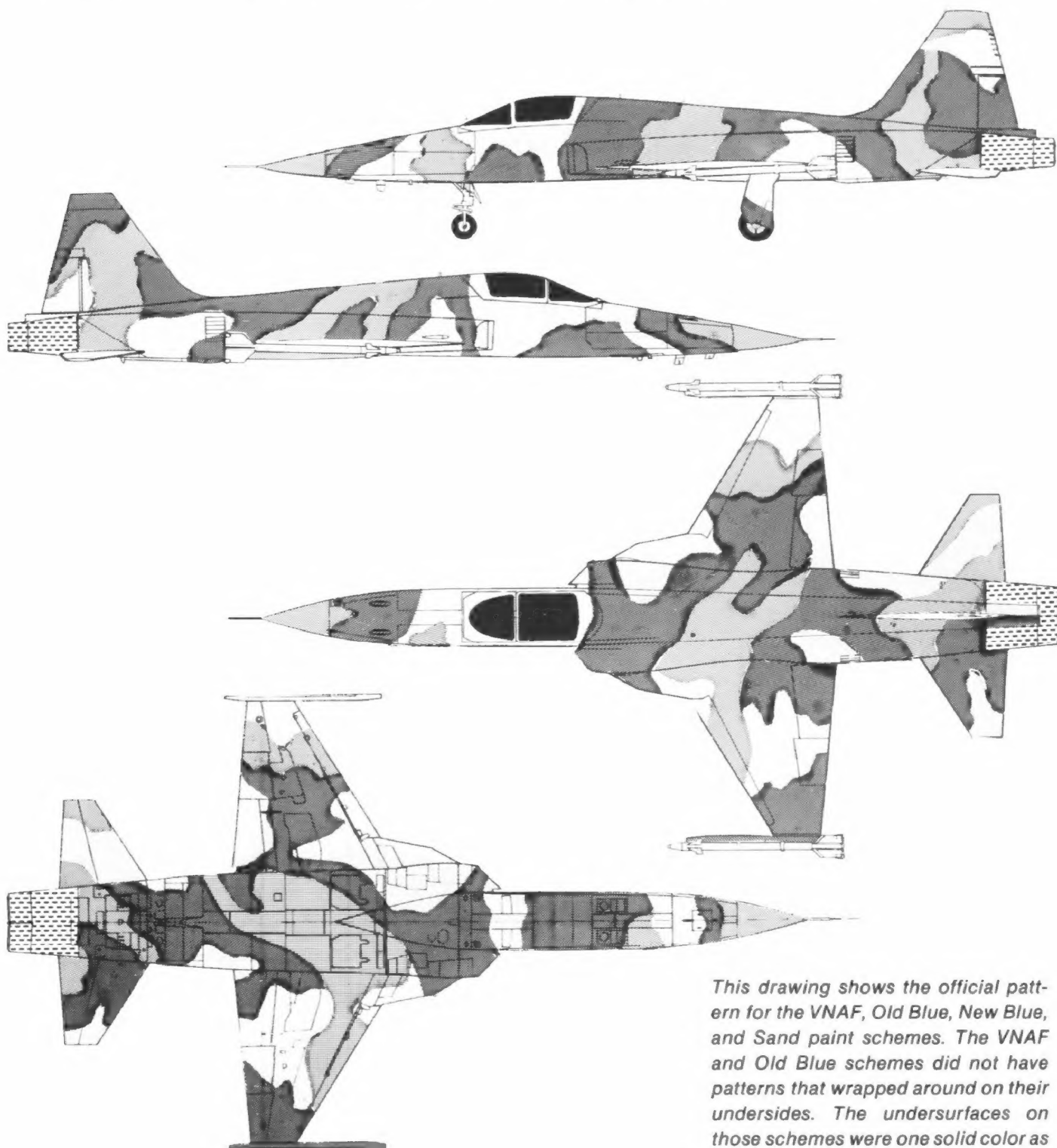


With the fall of South Vietnam, the U.S. Air Force took over F-5Es that were originally destined for that country. They were painted in the camouflage scheme that became popular for U.S. Air Force fighters during that war. It consisted of two greens and a tan over a very light gray, and it had also been used on other VNAF aircraft during the war. Gray was not used in place of the dark green as reported elsewhere. Because Vietnamese were sometimes called "Gomers" by Americans, the VNAF scheme was often referred to as the Gomer scheme. The VNAF scheme cannot be truly called an aggressor scheme in the true sense of the word, since it was not designed to simulate a scheme used on threat aircraft. However, it was flown for a long time by the aggressor squadrons, and has been generally accepted as an aggressor scheme. Aircraft painted in this scheme were among the first F-5Es to be received by the aggressor squadrons, and the pattern for the scheme was used for some of the subsequent aggressor paint schemes that were based on those used by potential threat aircraft. Different colors replaced the greens, tan, and gray on those schemes. (Kinzey)



The left side of 73-1635 clearly illustrates the VNAF camouflage pattern. Compare the color patterns in these photographs with the official drawings seen on page 7. (Spering/A.I.R.)

VNAF, OLD BLUE, NEW BLUE, & SAND OFFICIAL PATTERN AND COLORS



This drawing shows the official pattern for the VNAF, Old Blue, New Blue, and Sand paint schemes. The VNAF and Old Blue schemes did not have patterns that wrapped around on their undersides. The undersides on those schemes were one solid color as indicated.

	VNAF	OLD BLUE	NEW BLUE	SAND	FROG
	GREEN 34079	BLUE 35414	BLUE 35164	YELLOW 33690	GREEN 34052
	GREEN 34102	BLUE 35190	BLUE 35109	SEE MIX 1 BELOW	YELLOW 33717
	TAN 30219	BLUE 35164	BLUE 35414	SEE MIX 2 BELOW	BROWN 30111
UNDERSIDES	GRAY 36622	BLUE 35622	SEE PATTERN	SEE PATTERN	BLUE 35622

MIX 1 FOR SAND SCHEME: YELLOW 33613 AND BROWN 30227 IN A 4 TO 1.5 RATIO
MIX 2 FOR SAND SCHEME: BROWN 30227 AND YELLOW 33690 IN A 4 TO 1.5 RATIO

BLUE



This F-5E was one of the first to be painted in the original Blue scheme. We will simply refer to it as the Blue scheme in this book while the scheme shown on the next page will be referred to as the New Blue scheme. The solid color undersides are clearly visible. This photograph is dated April 1980. The aircraft in the background is in the Grape scheme.
(Kinzey)



The left side pattern of the Old Blue scheme is shown here. These two photographs, and the others shown with the "official" drawings on pages 6 through 27, illustrate the "artistic license" taken by the individuals who paint the aircraft. Although the pattern is generally recognizable when compared to the drawings, considerable deviation often exists. In other cases, such as with the New Blue scheme which is shown on the next page, the person painting the aircraft followed the official pattern quite closely. For some time radomes were left black as shown in the top photograph, but more recently, radomes have been camouflaged along with the rest of the aircraft. It should also be noted that the Old Blue scheme was not designed to wrap around the aircraft. However, after its introduction, some aircraft had this scheme wrapped around onto the undersides in an unofficial pattern. Several other schemes were also wrapped around unofficially on a number of aircraft. Most notably, these included the Old Ghost and Grape schemes. Note the variance in colors between this aircraft and the one in the photograph above. This illustrates that colors vary between aircraft painted in the "same" scheme. This variance can be caused by a number of reasons.
(can sau)

NEW BLUE



The New Blue scheme was similar to the Old Blue scheme with both 35414 and 35164 being used in both cases, although they were used in different places within the same pattern. In the New Blue scheme, 35109 replaced 35190 as the third color, and the new scheme wrapped around on the undersides of the aircraft instead of having the undersurfaces painted 35622.

(Jay)



A left side view of 72-1404 illustrates the pattern and colors in the New Blue scheme.

(Isham)

SAND



The Sand scheme was another one of the schemes specified in the February 1980 letter, and it also followed the VNAF pattern. It was used to simulate Soviet Fishbeds based in the Mid-East. (Isham)



The left side pattern of the Sand paint scheme is seen in this view of F-5E, 74-1570.

(Daniels)

PUMPKIN



The attachment to the February 1980 letter that specified what the Pumpkin scheme was to look like again showed the colors arranged in the same pattern as that used for the VNAF scheme. However, yellow, 33695, was specified for two different shadings on the drawing, and green, 34098, was specified for the remaining upper surface color. Yellow, 33690, was designated for the undersides. In reality, the Pumpkin pattern did not follow what was "officially" specified at all. The green was simply painted over the upper yellow in an unofficial pattern, and this varied considerably on the different aircraft that were painted in this scheme. Pumpkin was designed to simulate Soviet Fishbeds based in southern Warsaw Pact countries.

(Huston)



Another aircraft that was painted in the Pumpkin scheme was 74-0866. The left side of the aircraft is seen here. Notice that the same light gray was used for the bottom of this aircraft and for the aircraft in the VNAF scheme in the background.

(Kinzey)

GRAPE



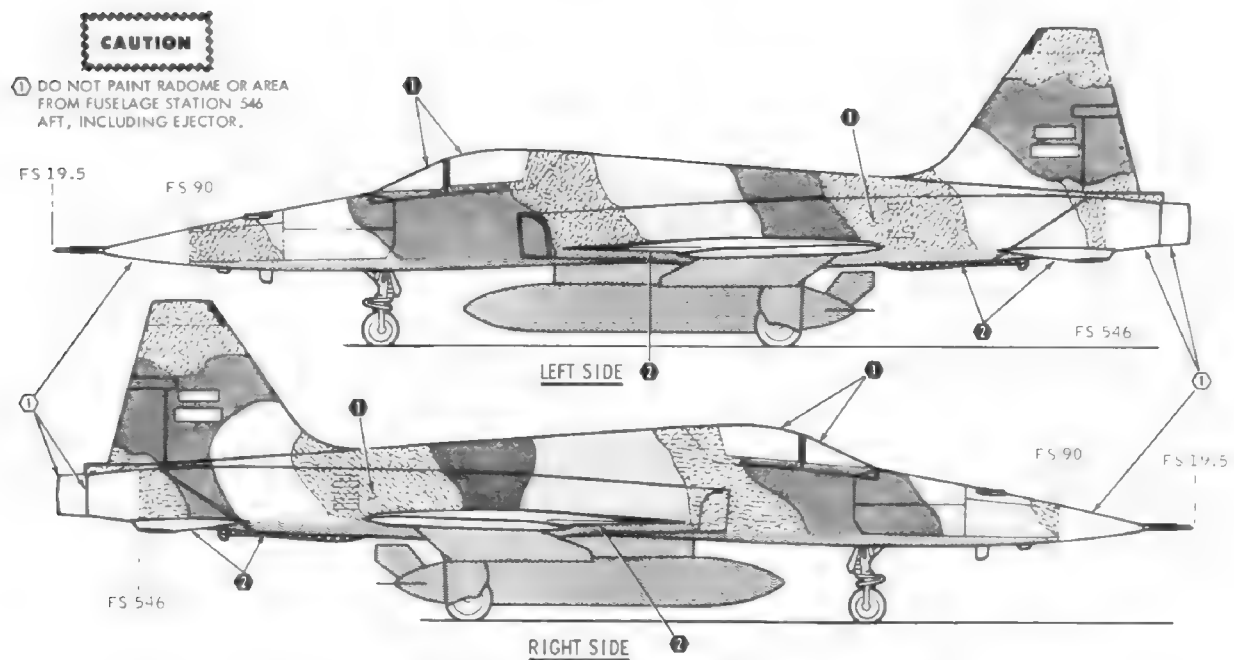
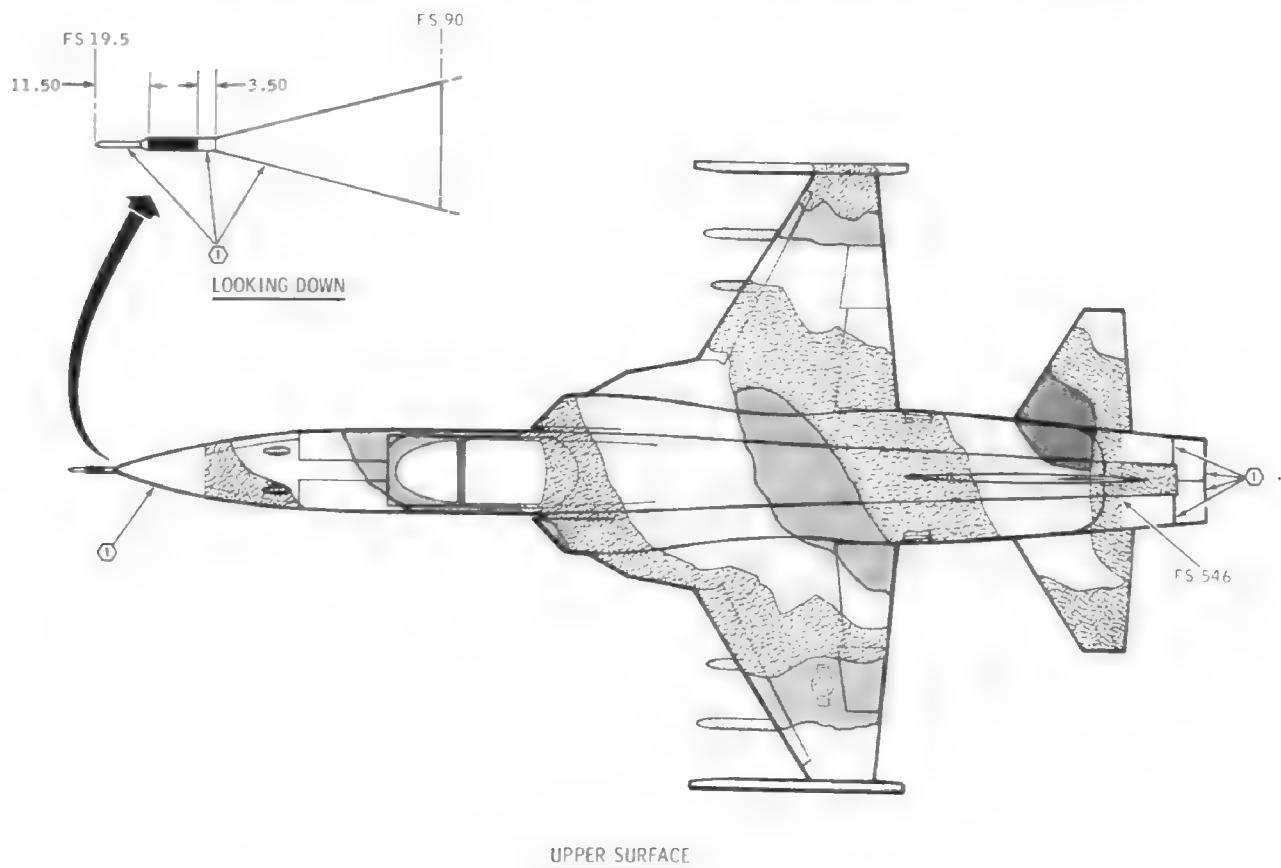
Grape was one of the earlier aggressor schemes, and generally simulated the same threat aircraft as the Blue schemes. Although Grape was to be totally replaced by the Old Blue scheme according to the February 1980 letter, it remained in service for quite some time beyond that date. (Greve)



A nice view of the left side of 74-1531 is shown in this photograph as the aircraft taxied out to the runway.

(Rotramel)

OFFICIAL PATTERN AND COLORS FOR THE GRAPE SCHEME



- Note*
- 1 DO NOT PAINT LIGHT LENS, TRANSPARENT PORTIONS OF ENCLOSURE GROUP, OR SIGHT GAGES AND RUBBER SEALS.
 - 2 UNDERSIDE OF FUSELAGE, WINGS, AND HORIZONTAL TAILS SHALL BE PAINTED BLUE. PATTERNS SHALL BE CARRIED DOWN APPROXIMATELY TWO-THIRDS OF FUSELAGE EXCEPT UNDER WING. TO AVOID SHARP LINE BETWEEN BLUE 35622 AND PATTERN, BLEND OVER AT LEAST 6.0 TO 9.0 INCHES TO ACCOMPLISH COUNTERSHADING EFFECT.
 - AIRCRAFT SHALL BE FINISHED WITH CAMOUFLAGE POLYURETHANE TOPCOAT, SPECIFICATION NAI-1290.
 - FOLLOWING REPAINTING, ENSURE THAT SERVICING AND MARKINGS ARE RE-APPLIED IF REMOVED OR PAINTED OVER. (SEE T.O. 1-1-4.)

Code		
AREA	COLOR IN ACCORDANCE WITH FEDERAL STANDARD NUMBER 595	COLOR NO.
	BLUE	35414
	BLUE	35109
	BLUE	35164
	BLUE	35622
	FLAT BLACK ANTIGLARE	37038

SNAKE



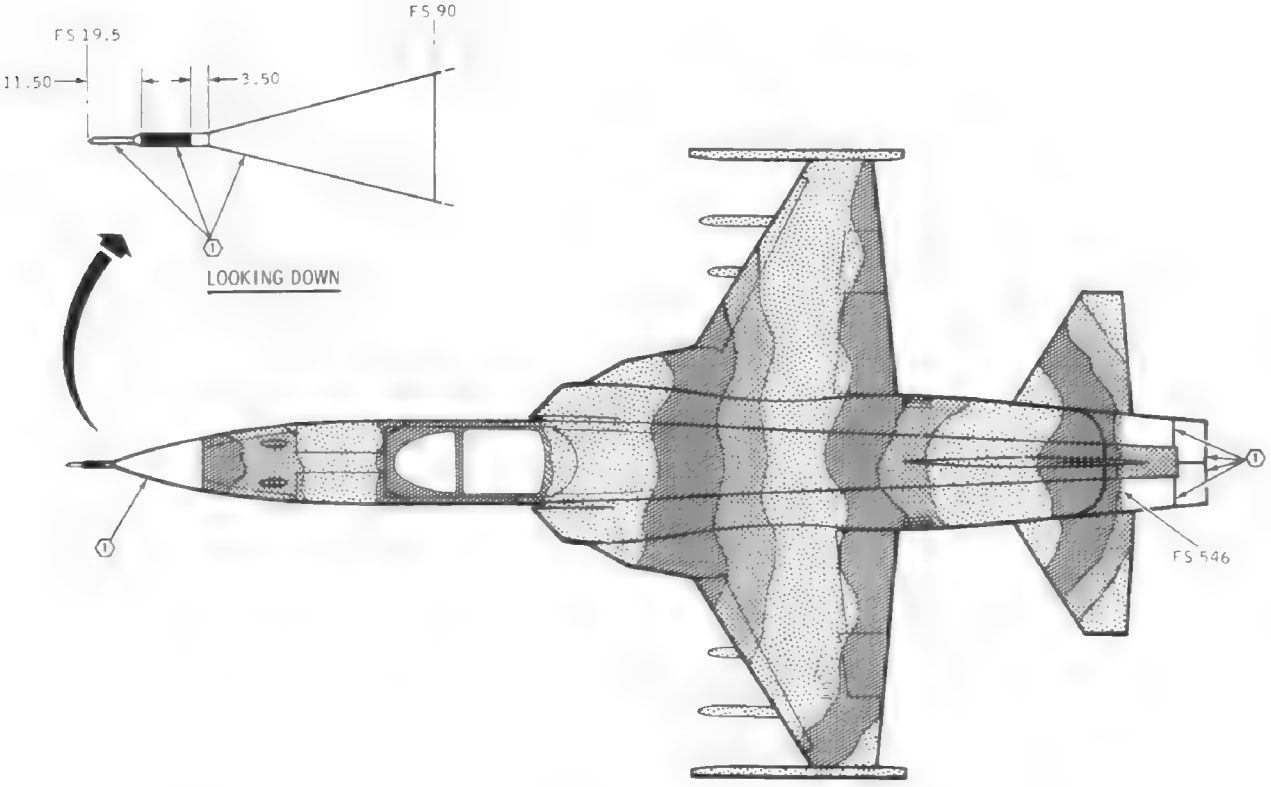
Snake was also one of the earlier aggressor schemes, and although it was included in the February 1980 letter, it was in use for quite some time before that date. It was used to simulate aircraft flown in Cuba. (Kinzey)



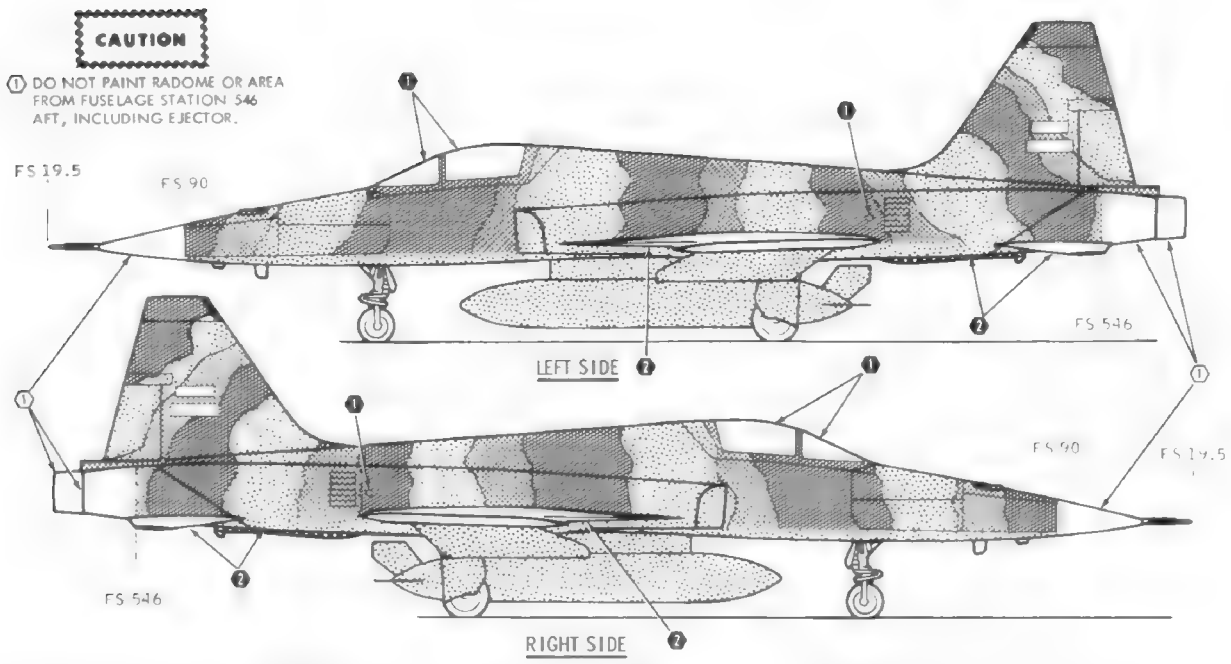
The left side of 74-1566 provides a different look at the camouflage pattern.

(Flightleader)

OFFICIAL PATTERN AND COLORS FOR THE SNAKE SCHEME



UPPER SURFACE



Note

- 1 DO NOT PAINT LIGHT LENS, TRANSPARENT PORTIONS OF ENCLOSURE GROUP, OR SIGHT GAGES AND RUBBER SEALS.
- 2 UNDERSIDE OF FUSELAGE, WINGS, AND HORIZONTAL TAILS SHALL BE PAINTED YELLOW. PATTERNS SHALL BE CARRIED DOWN APPROXIMATELY TWO-THIRDS OF FUSELAGE EXCEPT UNDER SING. TO AVOID SHARP LINE BETWEEN YELLOW AND PATTERN, BLEND OVER AT LEAST 6.0 TO 9.0 INCHES TO ACCOMPLISH COUNTERSHADING EFFECT.
- AIRCRAFT SHALL BE FINISHED WITH CAMOUFLAGE POLYURETHANE TOPCOAT, SPECIFICATION NAI-1290.
- FOLLOWING REPAINTING, ENSURE THAT SERVICING AND MARKINGS ARE RE-APPLIED IF REMOVED OR PAINTED OVER. (SEE T.O. 1-1-4.)

Code

AREA	COLOR IN ACCORDANCE WITH FEDERAL STANDARD NUMBER 595	COLOR NO
	GREEN	34258
	BROWN	30118
	YELLOW	33531
	FLAT BLACK ANTIGLARE	37038

OLD GHOST



The Ghost scheme consisted of pale blues and grays, and was designed to simulate Soviet fighters assigned to PVO Strany (the Soviet ADC) and Frontal Aviation (the Soviet TAC). It was one of the first aggressor schemes, and was included in the February 1980 letter, although that document called for a change in the number of colors from four to two. In practice it appears that the four-color scheme remained in use until the New Ghost scheme replaced it. The two gray colors used in the original four-color scheme were quite similar, and it was often difficult to determine where one ended and the other began.

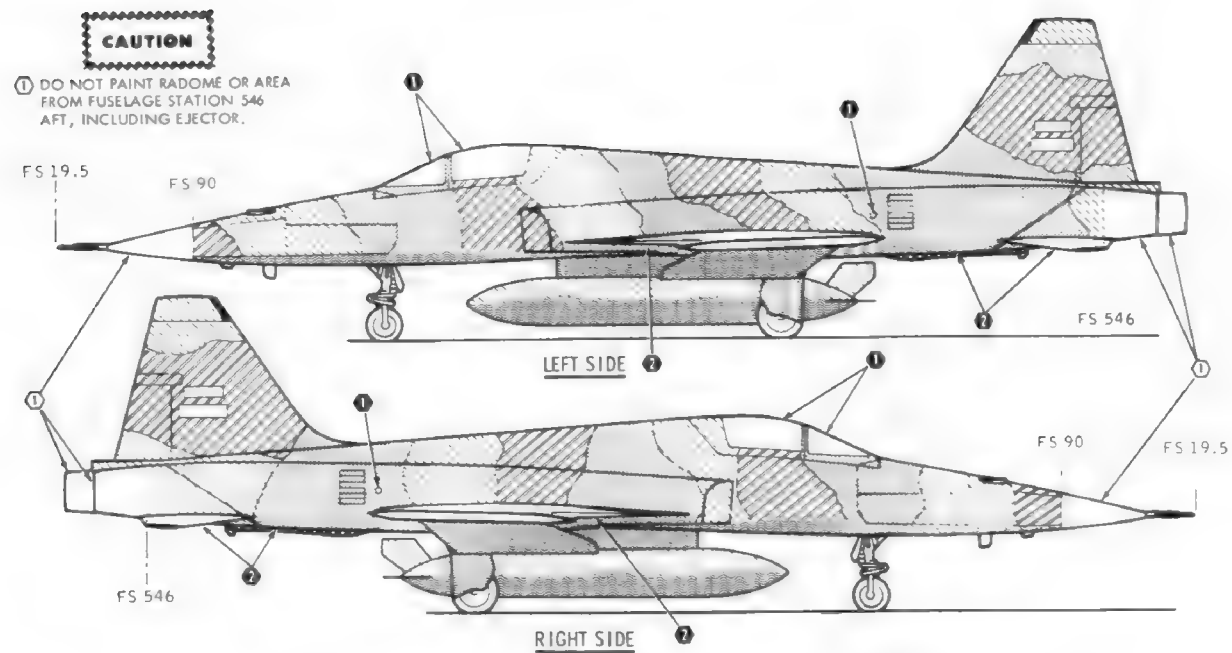
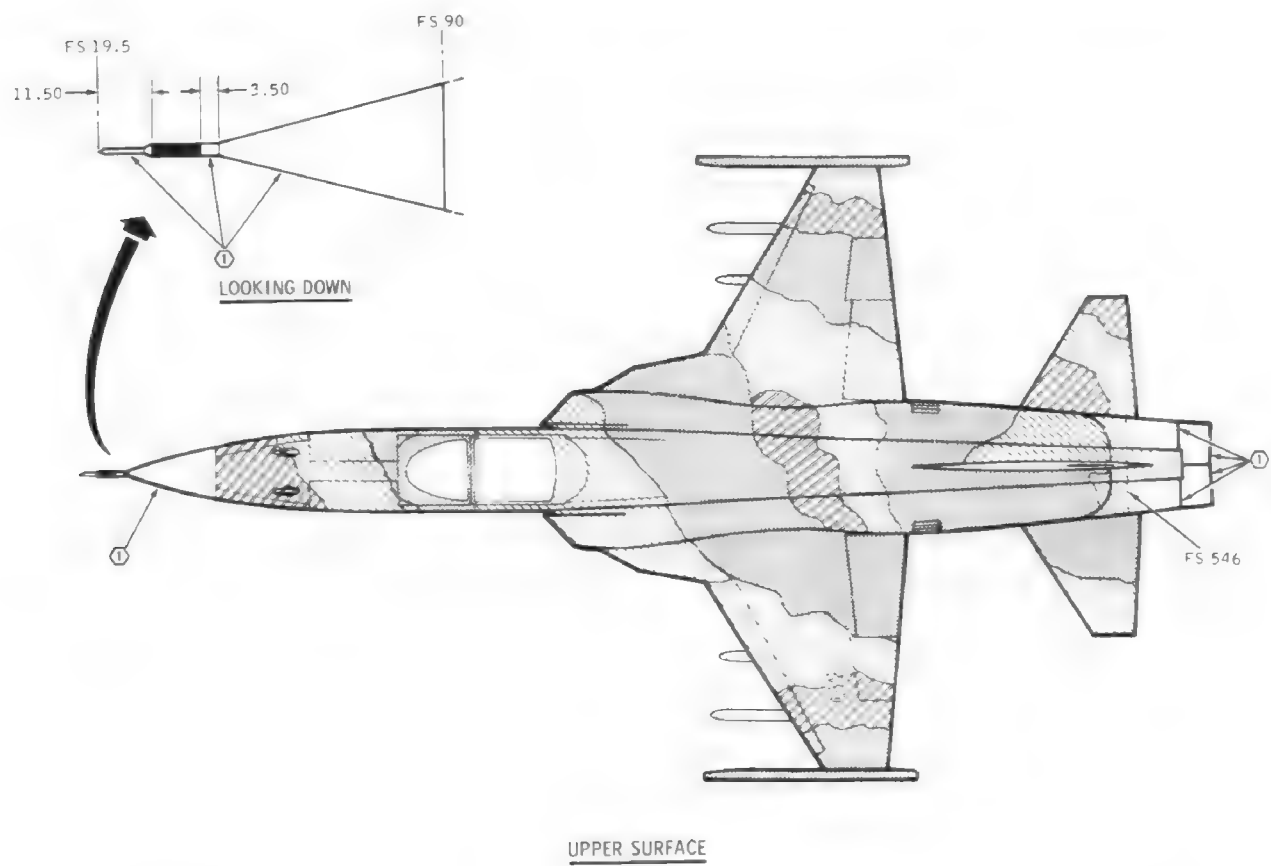
(Rotramel)



Compare this left side view of 74-1505 with the drawing on page 17. The faded paint causes the grays to blend together.

(Kinzey)

OFFICIAL PATTERN AND COLORS FOR THE OLD GHOST SCHEME



- Note*
- 1 DO NOT PAINT LIGHT LENS, TRANSPARENT PORTIONS OF ENCLOSURE GROUP, OR SIGHT GAGES AND RUBBER SEALS.
 - 2 UNDERSIDE OF FUSELAGE, WINGS, AND HORIZONTAL TAILS SHALL BE PAINTED BLUE. PATTERNS SHALL BE CARRIED DOWN APPROXIMATELY TWO-THIRDS OF FUSELAGE EXCEPT UNDER WING. TO AVOID SHARP LINE BETWEEN BLUE 35622 AND PATTERN, BLEND OVER AT LEAST 6.0 TO 9.0 INCHES TO ACCOMPLISH COUNTERSHADING EFFECT.
 - AIRCRAFT SHALL BE FINISHED WITH CAMOUFLAGE POLYURETHANE TOPCOAT, SPECIFICATION NAI-1290.
 - FOLLOWING REPAINTING, ENSURE THAT SERVICING AND MARKINGS ARE RE-APPLIED IF REMOVED OR PAINTED OVER. (SEE T.O. 1-1-4.)

Code		
AREA	COLOR IN ACCORDANCE WITH FEDERAL STANDARD NUMBER 595	COLOR NO.
	BLUE	35237
	GRAY	36251
	GRAY	36307
	BLUE	35622
	FLAT BLACK ANTIGLARE	37038

NEW GHOST

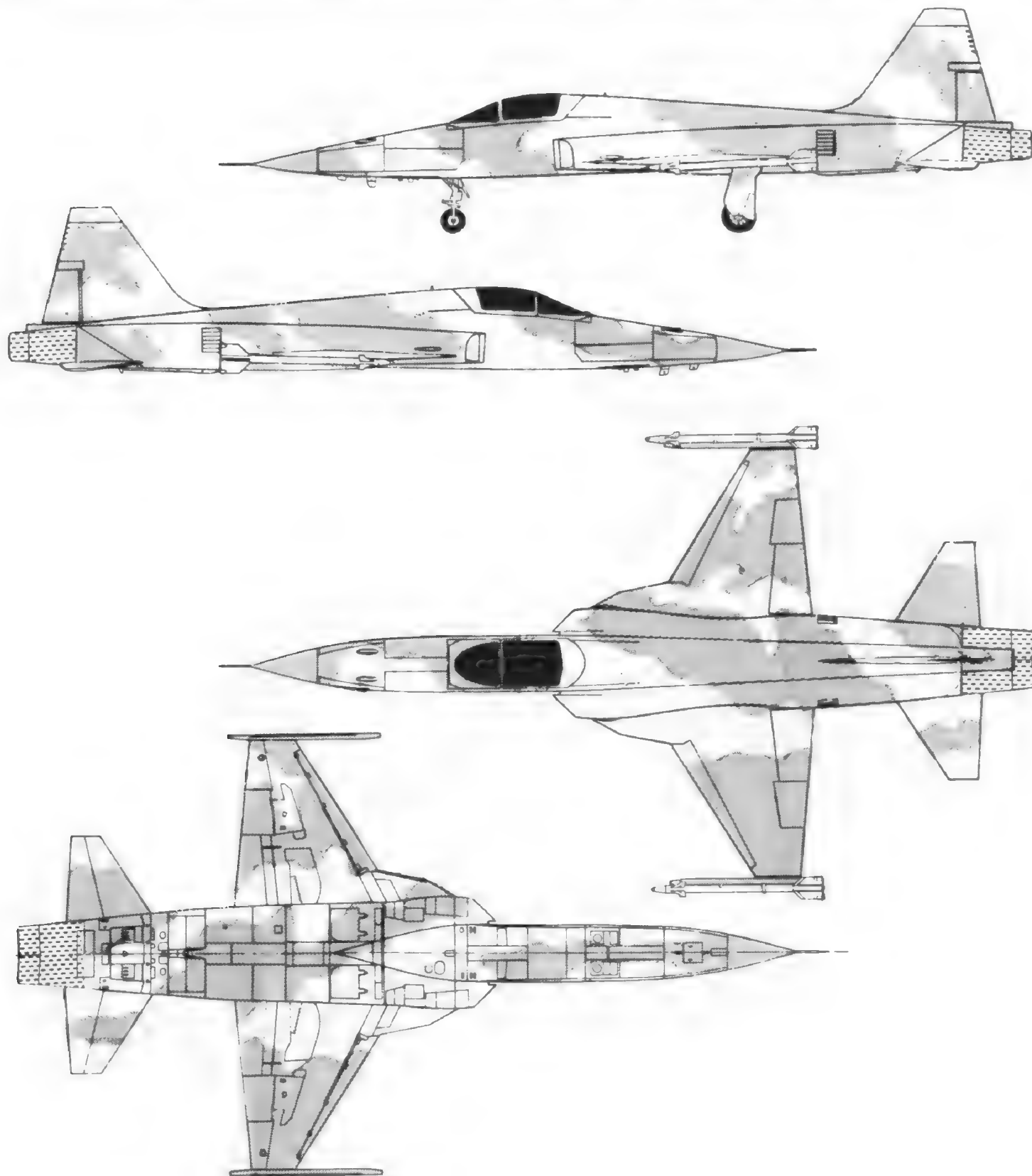


The New Ghost scheme consisted of two shades of gray, and there were two variations. The colors were mixes, rather than standard paint colors. One of the grays has been mixed two different ways as illustrated in the drawing on the next page, and, as a result, there are actually two New Ghost schemes. The scheme is now simply referred to as Ghost, but we will call it New Ghost in this publication to avoid confusion with the earlier Ghost scheme. (Whited)



A different F-5E, 74-1512, was also painted in the New Ghost scheme. The left side of the aircraft is seen here. The two shades of gray are easy to see in this view. (MacPherson)

OFFICIAL PATTERN AND COLORS FOR THE NEW GHOST SCHEME



AREA

COLOR



GRAY 36622 AND BLACK 37038 IN A 4 TO 1 RATIO



GRAY 36492 AND BLACK 37038 IN AN 8 TO 1 RATIO, OR GRAY 36270 AND BLACK 37038 IN A 4 TO 1 RATIO*

* BECAUSE TWO DIFFERENT MIXES EXIST FOR THE SECOND COLOR, TWO DIFFERENT NEW GHOST SCHEMES EXIST.

OLD LIZARD



The original Lizard scheme was very similar to the Snake scheme, except that the green was deleted. It was based on aircraft seen in many African countries, and was one of the earliest and simplest of all of the aggressor schemes. We will simply refer to it as the Lizard scheme in this book.

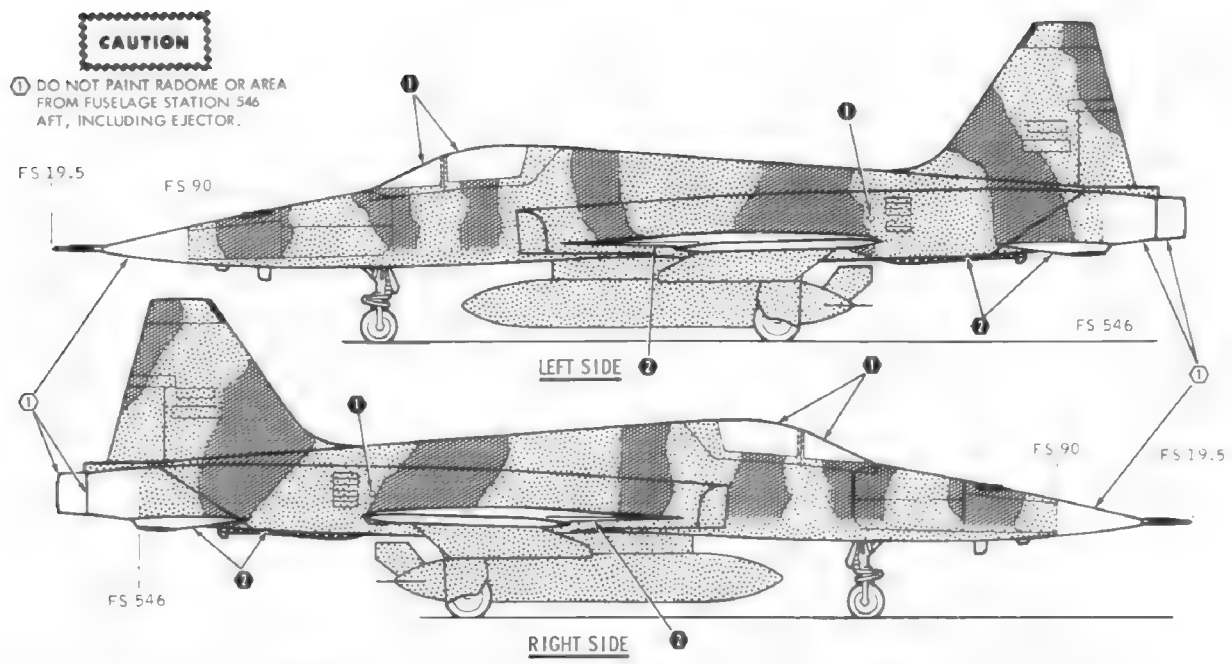
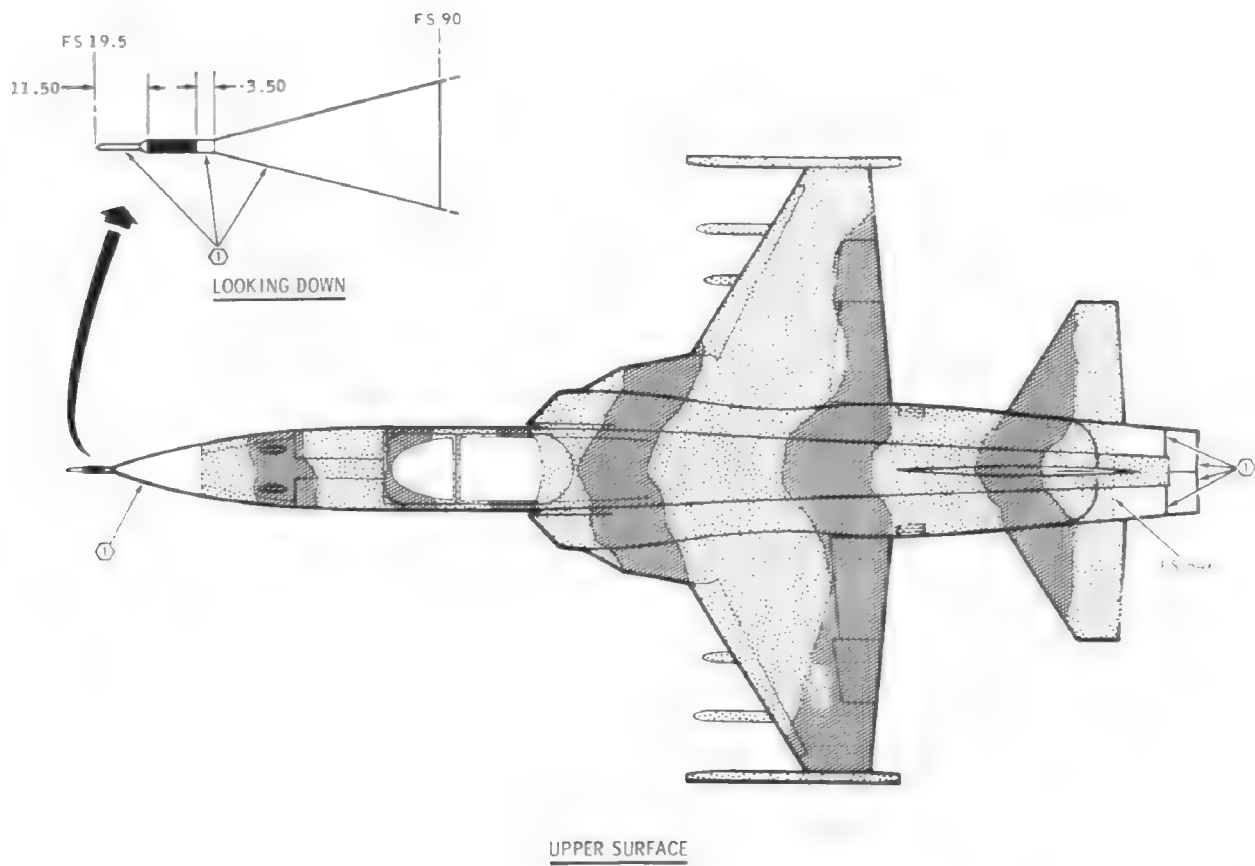
(Flightleader)



The left side of 74-1564 shows the camouflage pattern on that side of the aircraft. Compare this photograph with the pattern of the drawing on page 21.

(Van Geffen/I.A.A.P.)

OFFICIAL PATTERN AND COLORS FOR THE OLD LIZARD SCHEME



- Note**
- 1 DO NOT PAINT LIGHT LENS, TRANSPARENT PORTIONS OF ENCLOSURE GROUP, OR SIGHT GAGES AND RUBBER SEALS.
 - 2 UNDERSIDE OF FUSELAGE, WINGS, AND HORIZONTAL TAILS SHALL BE PAINTED YELLOW. PATTERNS SHALL BE CARRIED DOWN APPROXIMATELY TWO-THIRDS OF FUSELAGE EXCEPT UNDER WING. TO AVOID SHARP LINE BETWEEN YELLOW AND PATTERN, BLEND OVER AT LEAST 6.0 TO 9.0 INCHES TO ACCOMPLISH COUNTERSHADING EFFECT.
 - AIRCRAFT SHALL BE FINISHED WITH CAMOUFLAGE POLYURETHANE TOPCOAT, SPECIFICATION NAJ-1290.
 - FOLLOWING REPAINTING, ENSURE THAT SERVICING AND MARKINGS ARE RE-APPLIED IF REMOVED OR PAINTED OVER. (SEE T.O. 1-1-4.)

Code

AREA	COLOR IN ACCORDANCE WITH FEDERAL STANDARD NUMBER 595	COLOR NO.
	YELLOW	33531
	BROWN	30118
	FLAT BLACK ANTIGLARE	37038

NEW LIZARD

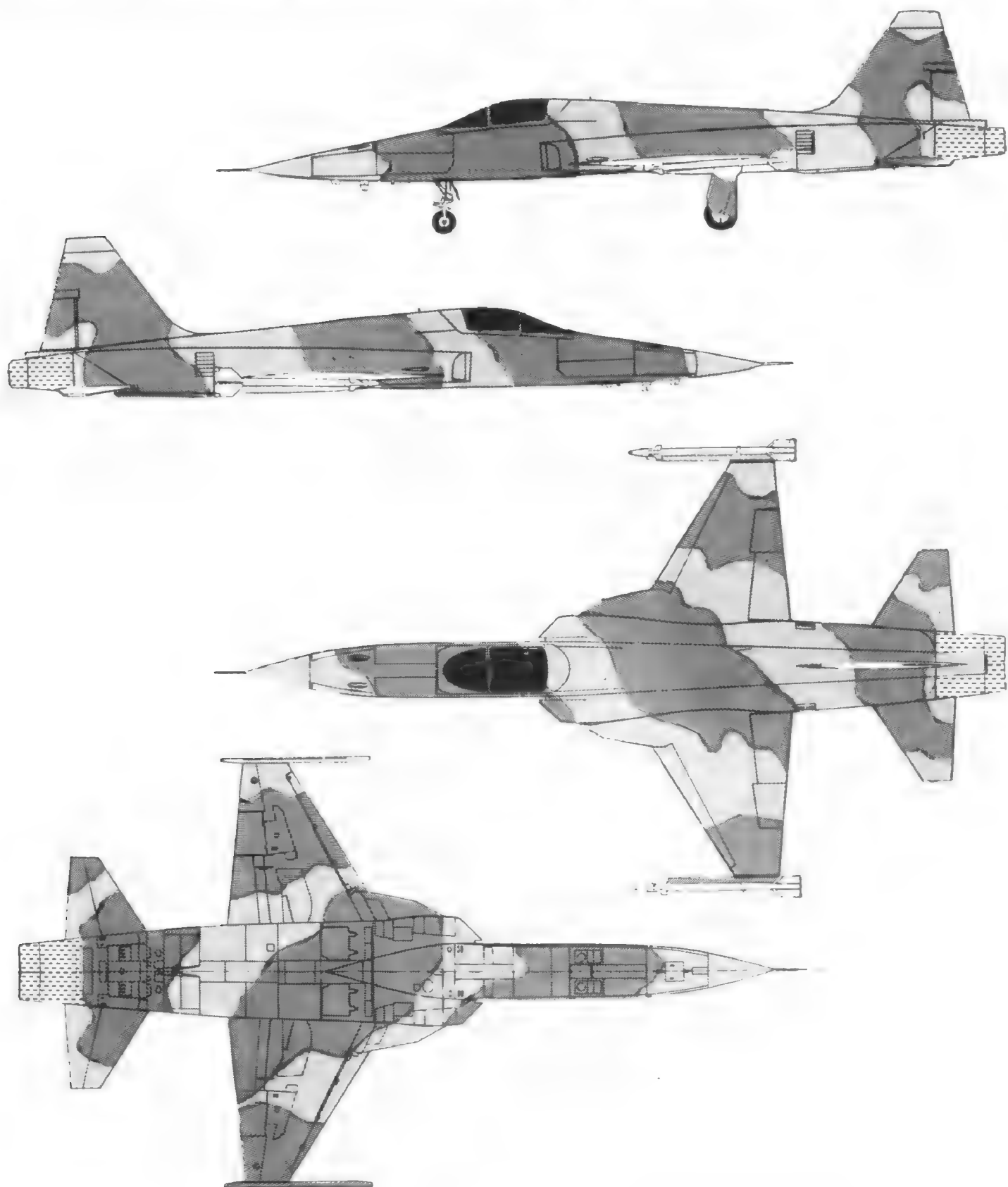


A New Lizard scheme has now replaced the original one, and is obtained by mixing a brown and a yellow as indicated on the drawing on the next page. When colors are mixed for a scheme, more variation in the colors can be noted from aircraft to aircraft that are painted in the "same" scheme. (Whited)



The pattern on the left side is seen in this view of 74-1528. A comparison of the patterns may be made with the official drawings on page 23. (Kaston via Isham)

OFFICIAL PATTERN AND COLORS FOR THE NEW LIZARD SCHEME



AREA	COLOR
	BROWN 30117 AND YELLOW 33613 IN AN 8 TO 1 RATIO
	YELLOW 33613 AND BROWN 30117 IN AN 8 TO 1.25 RATIO

FLOGGER



The Flogger scheme was designed to simulate Soviet Floggers in Frontal Aviation. Unlike some of the other newer schemes, the Flogger scheme uses Federal Standard colors rather than mixes according to the official drawing and specifications as seen on the following page.

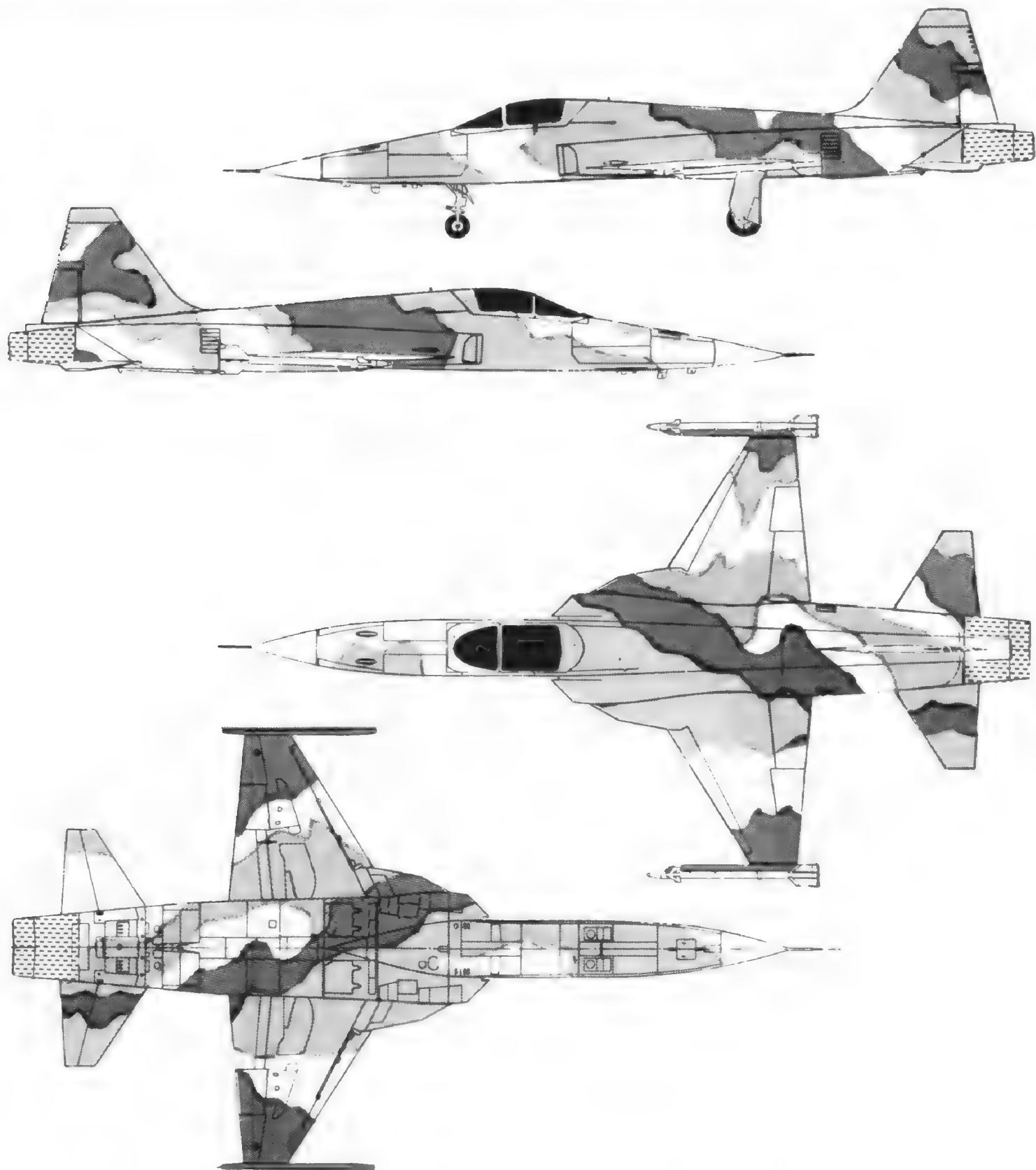
(Isham)




F-5E, 74-1567, was also painted in the Flogger scheme. The pattern on the left side and the bottom of the aircraft is clearly visible.

(Grove)

OFFICIAL PATTERN AND COLORS FOR THE FLOGGER SCHEME



AREA	COLOR
	GREEN 34079
	BROWN 30140
	BROWN 20400

FROG ???



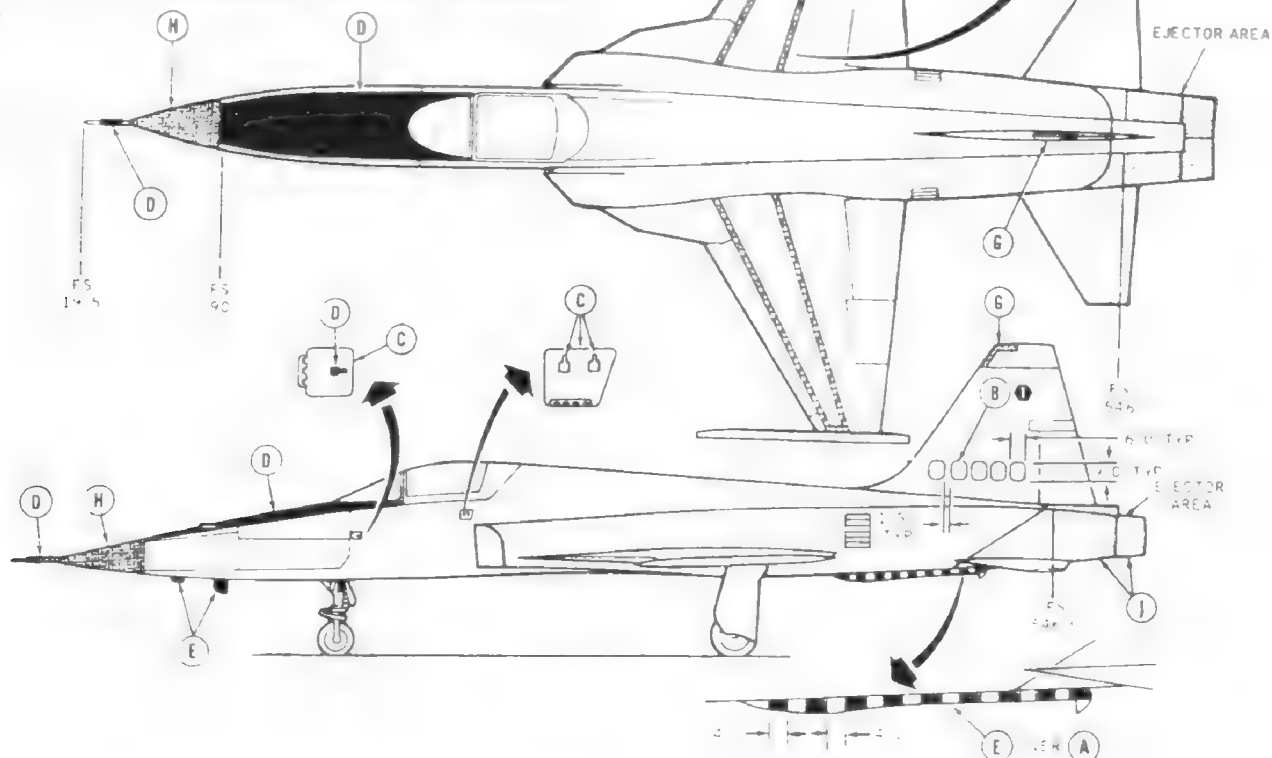
In the letter of February 27, 1980, a scheme to be known as Frog was specified. It was patterned after Soviet Frontal Aviation Floggers, but official sources say that it was never used. However, this F-5E, 73-0897, appears to conform to the specifications drawn up for the Frog scheme. The pattern was basically the same as VNAF. It would appear that the Frog scheme gave way to the Flogger scheme as a representation of Soviet Frontal Aviation Floggers. (can sau)



This is another view of 73-0897 in what appears to be the Frog scheme. This is the only aircraft we have ever seen in this scheme, and it was very short lived. The photograph is dated February 14, 1981. (Peake)

SILVER AND GRAY SCHEMES

- A GLOSS INSIGNIA WHITE 17875
- B GLOSS INSIGNIA BLUE 15044*
- C GLOSS ORANGE-YELLOW 13538
- D FLAT BLACK ANTIGLARE 37038
- E GLOSS BLACK 17038
- F SCOTCHCAL -- 2-INCH WIDE -- BLACK
- G RAIN EROSION RESISTANT COATING
- H RAIN EROSION RESISTANT COATING WITH ANTISTATIC TREATMENT
- J DO NOT PAINT



SILVER AIRCRAFT ARE TO BE PAINTED WITH AN ALUMINIZED POLYURETHANE TOPCOAT.

GRAY AIRCRAFT ARE TO BE PAINTED OVERALL GRAY IN THE SHADE DESIRED. THE FIRST GRAY **SPECIFIED** FOR USE ON AN AGGRESSOR AIRCRAFT WAS 36492, BUT A NUMBER OF OTHER GRAYS HAVE ALSO BEEN USED.

Many Soviet and Soviet Bloc aircraft are left in a bare metal or silver dope paint scheme. Therefore the aggressors used the Silver scheme as well. Contrary to reports published elsewhere, none of the aggressor squadrons have ever used a bare metal F-5E or -F. Aircraft in the Silver scheme were actually painted with an aluminized polyurethane topcoat or silver dope. (can sau)

Overall gray schemes have also been used on aggressor aircraft, and the shades have ranged from pale to dark with various mixes being used. The first gray to be officially specified for one of these overall gray schemes was FS 36492, but even the standard ADC gray has been applied to some aircraft. This F-5E is painted in one of the darker overall gray schemes, while the one in the background is in the lighter ADC gray. (can sau)



NELLIS AFB---THE 57th FWW



Colonel Chuck Cunningham was the commander of the 57th FWW when this photograph was taken. His name appears on the left canopy rail, while the crew chief's name, **Mike Christlan**, appears on the right side seen here. Lettering for the names is in white Old English. (Cole)

Nellis Air Force Base, which is located near Las Vegas, Nevada, is the home of two of the four aggressor squadrons in the USAF. The 64th and 65th Aggressor Squadrons are located in close proximity to each other and fly the same aircraft. For some time, it was impossible to walk out on the ramp and tell which aircraft belonged to the 64th or the 65th. There were no special markings to designate the squadron to which any given aircraft was assigned. The aircraft carried the 57th Fighter Weapons Wing's (formerly Tactical Training Wing) crest on the fuselage just aft of the intake, and that wing's yellow and black checkered band was painted on the tail. The TAC badge was also carried on the vertical tail. But by the mid-1980s, the 65th AS had started painting its aircraft with a blue nose number that was outlined in white, while the 64th retained the red number with the yellow outline. But according to sources at Nellis, pilots from both squadrons can be assigned to fly any of the available aircraft, so, from a practical standpoint, the aircraft really

don't "belong" to one squadron or the other.

A visitor to Nellis and the aggressor squadrons can easily be convinced that he has been transferred to the home of Soviet fighter squadrons. Soviet markings are everywhere on the inside and outside of the buildings, and the 64th's building is guarded by an old Soviet tank. The pilots that are assigned to the two squadrons, and who are trained to fly Soviet tactics against other American and allied pilots, are very competitive and seem to really get involved with their mission. They look at themselves as a close-knit unit that is out to "win" against the Blue Force. But, as one aggressor pilot said, "If we really do our job well, the pilots that we fly against will learn how to fight and win against outstanding pilots flying Soviet tactics in aircraft that simulate those flown by potential enemies. We always fight to win, but our ultimate goal is to teach pilots how to beat us. Therefore, in the final analysis, we really hope to lose."



The 64th and 65th Aggressor Squadrons are housed in similar buildings at Nellis AFB, Nevada. At left is the 64th's building, and at right is the home of the 65th. (Kinzey)



A visitor to either one of the buildings that house the aggressor squadrons at Nellis would think he had walked into the headquarters of a Soviet fighter squadron. Red stars and other Soviet symbology are everywhere. This is the briefing room for the 64th AS, and the missile to the left is an AA-2 Atoll, which is a copy of an early version of the American AIM-9 Sidewinder. The rug is a replica of the squadron patch, and has the words **64th FTR WPNS SQ** at the bottom.

Red Flag and other training missions are flown regularly by the 64th and 65th Aggressor Squadrons from their Nellis AFB home. They also travel far and wide to other bases to provide training to other units. This training is not only conducted in the air, but an equally important part is done on the ground in briefings, instruction, and critiques.

Our coverage of the two Nellis-based aggressor squadrons begins with the early days in T-38s and then the F-5s prior to the time the 65th AS changed its nose



This is the operations desk for the 64th Aggressor Squadron, which was known as the 64th Fighter Weapons Squadron when this photograph was taken in April 1980.



It is almost impossible to be out of sight of a reminder that you are at the squadron headquarters of a unit that plays the role of the aggressors. Red stars are virtually everywhere, as indicated by this interesting photograph!

numbers to blue and white. This is followed by separate sections on the two squadrons that show the aircraft, patterns, and colors used on the aircraft once the use of different colored nose numbers was begun. Aircraft painted in special markings for the commanders of the two squadrons, as well as the other aircraft in almost every imaginable scheme, are illustrated. These sections are then followed by a look at the 527th and 26th Aggressor Squadrons that provide aggressor support to the European and Pacific areas, respectively.



This Limpus Puddus Award is presented monthly to the aggressor pilot who poses the least threat to an adversary. It is the pitot tube from an F-5E that crashed.



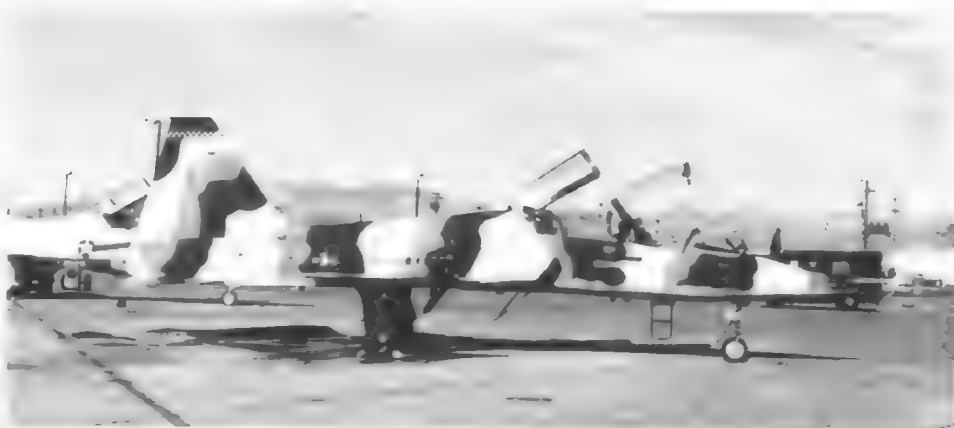
T-38A, 61-3168, was one of the early aircraft that was painted in an aggressor scheme. The colors were dark green, tan, and sand. Notice the size of the aircraft serial number painted in black on the tail. (Brewer)

A different paint scheme was painted on T-38A, 61-3280, when it was photographed in 1973. Two shades of gray were used, and they covered the entire aircraft to include the area usually painted black for the anti-glare panel. (Brewer)



T-38A, 63-8247, was painted in the colors used for the scheme that was later named Lizard. The aircraft was photographed at Nellis AFB, Nevada, on December 30, 1974. At that time the TAC badge and the 57 FWW's yellow and black checkered band had been added to the tail. (Logan via Isham)

The colors painted on 65-10450 were later used for the paint scheme named Snake. The T-38As on this page were all assigned to the 64th Fighter Weapons Squadron, which was later renamed the 64th Aggressor Squadron. (Logan via Isham)





This 64th FWS T-38A was photographed at Eglin AFB, Florida, on November 2, 1974. The aircraft was painted in the scheme that was to become known as Grape. (Flightleader)

T-38A, 64-13280, assigned to the 64th FWS, was on display at Nellis AFB, Nevada, when photographed in November 1974. The aircraft was painted in the Ghost scheme.

(Haskin via Isham)



Some of the aggressor aircraft were painted in less exciting schemes as seen in this view of 62-3666. The photograph was taken at McDill AFB, Florida, on October 15, 1974. The aircraft was in the ADC gray with the usual 57th FWW markings painted on the tail.

(Haskin via Isham)

Several of the aggressor aircraft were flown in the old ATC white paint scheme until they could be repainted. This example was photographed at Nellis AFB, Nevada, in March 1975. The 57th FWW checkered band and TAC badge had been added to the tail.

(Swanberg via Geer)





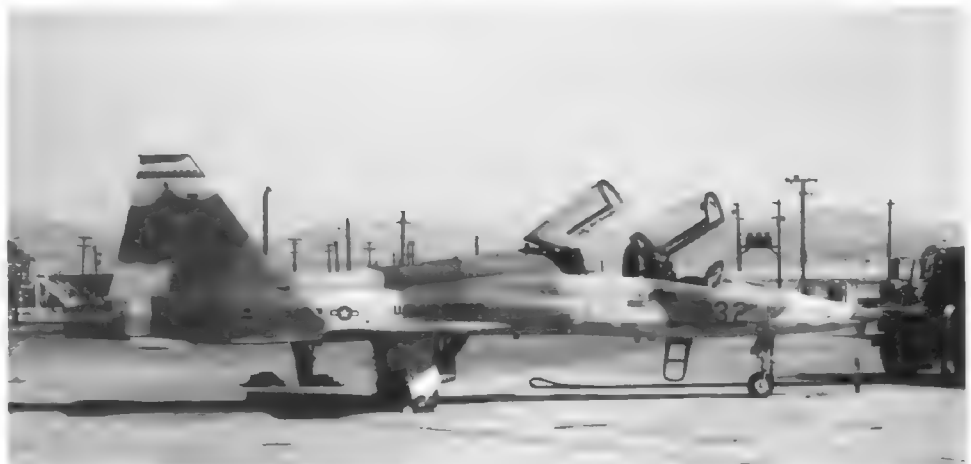
T-38A, 62-3673, was photographed at Nellis AFB, Nevada. The aircraft was painted in a test paint scheme of an overall blue-gray. None of the usual Nellis markings had been applied to the aircraft when this photograph was taken. (Haskin via Isham)

The use of Soviet style aggressor nose numbers had begun when this T-38A, 62-3614, was photographed in August 1975. The aircraft was painted overall light gray with the number 64 being in red, outlined with yellow. (Geer)



This T-38A was photographed at Nellis in August 1975. The aircraft was painted in the shades of gray that were used for the Ghost scheme. The red 76 that was used as the nose number was the same as the last two digits of the serial number. This became the custom for the aggressor aircraft. (Geer)

T-38A, 62-3632, was painted in the Grape scheme. (Geer)





T-38A, 62-3678, which was assigned to the 64th FWS, was photographed on March 9, 1980, at Nellis AFB, Nevada. The aircraft was painted in a variation of the original Blue scheme. The red nose number was outlined in black instead of the usual yellow. The 57th FWW badge had also been added to the fuselage. (Isham)

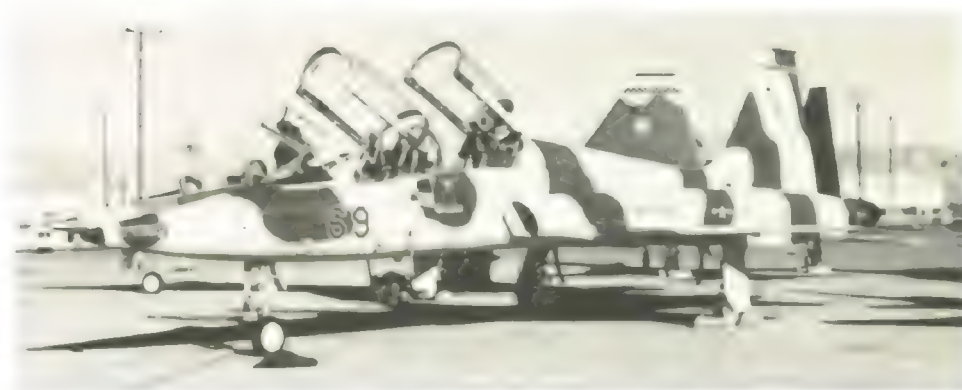
Although still in its aggressor scheme, this T-38A had been reassigned to the 479th TTW at Holloman AFB, New Mexico, by the time this photograph was taken in March 1979. Notice the addition of dark gray on the leading edge of the tail and under the rear cockpit. This gray had been added to the other lighter shades of gray.

(Bracken via Whited)

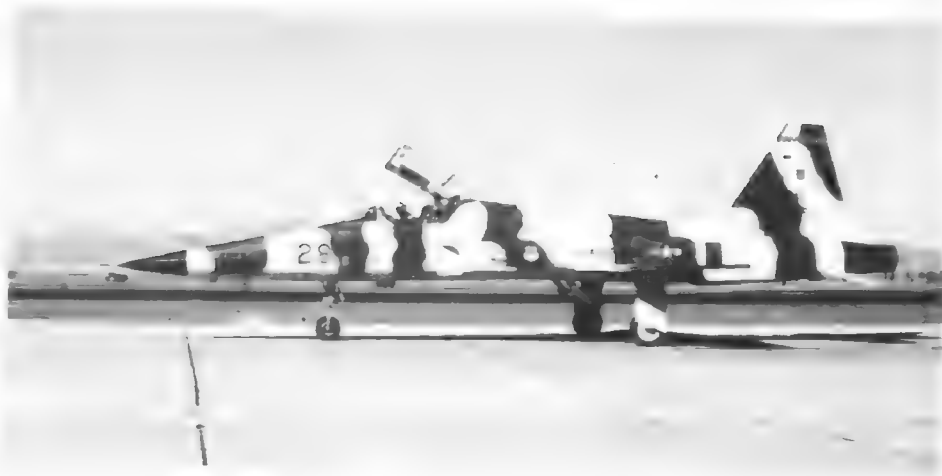


The Snake paint scheme was on this T-38A when it was on display at the Nellis AFB open house on November 22, 1975. (Flightleader)

T-38A, 61-3169, was painted in the Lizard scheme and was assigned to the 64th FWS. (Flightleader)



F-5E's had made their appearance with the 57th FWW by the time this photograph was taken in March 1976. F-5E, 74-1528, was assigned to the 65th FWS and was painted in the Lizard scheme. The nose number 28 was red, outlined in yellow. The wing badge was displayed on the fuselage behind the intake. (Rotramel)



This F-5E was on display at the open house at Nellis AFB on December 4, 1976. The aircraft was painted in the Snake paint scheme. (Flightleader)

F-5E, 74-1531, assigned to the 64th FWS, was photographed as it taxied in from a mission at Nellis AFB. The aircraft was painted in the Grape scheme. (Flightleader)



The two tone gray scheme was painted on 74-1513 when this photograph was taken on December 3, 1976. (Flightleader)



This view of three F-5Es shows the unusual Ferris paint scheme that was tested, but not adopted, by the aggressor squadrons. The aircraft had two or three shades of gray painted in a splinter camouflage pattern. Barely noticeable is the dark gray painted under the nose. This was to represent the false canopy painted on the bottom of the aircraft.
 (Logan)



A better view of the pattern applied to F-5E, 74-1510, of the 65th FWS, is seen here. Three different shades of gray are present, and the false canopy can be seen under the nose of the aircraft.
 (Logan)

The aggressor squadrons also flew aircraft in the anodized aluminum paint scheme. This became known as the Silver paint scheme. F-5E, 72-1388, was photographed on February 14, 1981, and shows the aircraft with full markings for the 64th FWS.

(Peake via Whited)





*The aggressors traveled to all parts of the United States to conduct training with various units. F-5E, 74-1539, of the 64th FWS was photographed on the transit ramp at Dobbins AFB, Georgia, on November 4, 1978. The aircraft was painted in the Ghost scheme and carries a ferry tank.
(Flightleader)*



*F-5E, 73-0896, painted in the VNAF scheme, was photographed on the ramp at Nellis AFB. Notice the red **96** on the nose without any outlining.
(Huston)*

*An unusual paint scheme was applied to F-5E, 74-1537. The aircraft was painted an overall light gray with the usual aggressor markings. This photograph was taken on January 31, 1981.
(Flightleader)*





F-5E, 74-1531, was photographed on March 31, 1980. The aircraft was painted in the Grape scheme. Notice the red Soviet style star painted on the nose gear door. Due to detente, the Soviet stars made only a short appearance on the aircraft. (Flightleader)



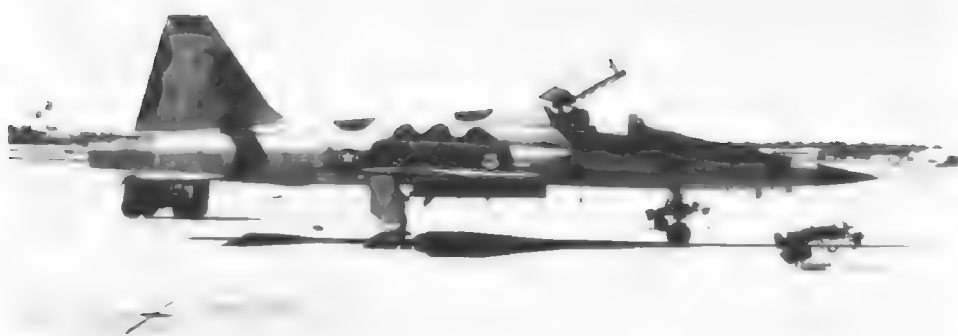
Another F-5E that carried the Soviet style star on the nose gear door was 74-1558. The aircraft was painted in the Lizard scheme. (Bergagnini)

This left front view of 74-1558 illustrates the Lizard paint scheme applied to that side of the aircraft. The aircraft was carrying a ferry tank on the centerline pylon when photographed on January 19, 1980. (Spidle)



F-5E, 74-1564, was assigned to the 64th FWS when it was photographed at Ft. Campbell, Kentucky, in December 1980. The aircraft was painted in an "unofficial" scheme of yellow, brown, and green. (Campbell)





Another interesting paint scheme was called *Pumpkin*, illustrated here on F-5E, 73-0846. Notice the change to the three digit nose number **846**, which is red, outlined in white. The white outlining was unusual since yellow was normally used. (Whited)



This left side view of F-5E, 73-0847, shows the pattern of the *Pumpkin* scheme. The nose number **847** was red, outlined with the usual yellow. (can sau)

The opposite side of 73-0847 is seen in this photograph. Barely visible is a small red Soviet star on the nose wheel door. (can sau)





F-5E, 72-1406, was assigned to the 65th AS when this photograph was taken on March 19, 1982. The aircraft was painted in the "official" Pumpkin scheme. This pattern is one of only two known cases that follows the Pumpkin scheme called for in Colonel Cunningham's letter of February 1980. It is the VNAF pattern with yellow, 33965, painted over where both green, 34079, and tan, 30219, was used on the VNAF scheme. Green, 34098, is painted where green, 34102, was used before. Most other aircraft painted in what was known as the Pumpkin scheme varied considerably from this "standard".
(can sau)

The 65th AS also used the three digit nose number as seen in this view of 72-1403. The aircraft was in a three tone gray scheme that followed the Flogger pattern. It had the number 403 painted in red, outlined with yellow.

(Daniels)



The Blue paint scheme was painted on 72-1396 when this photograph was taken on March 12, 1982. (can sau)



F-5E, 74-1514, from the 64th FWS, was photographed at Luke AFB, Arizona, in May 1985. The aircraft was painted in the Ghost scheme.
(Geer)

64th AGGRESSOR SQUADRON



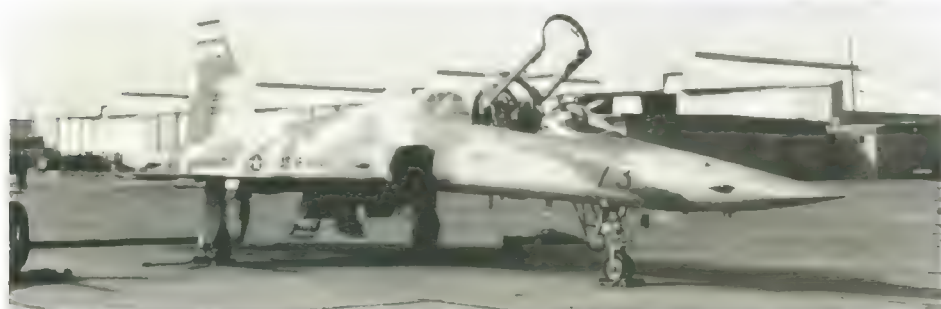
F-5E, 74-1564, served as the squadron commander's aircraft for the 64th FWS when photographed in June 1983. The aircraft was painted in an unusual scheme of two shades of brown and green. Notice the serial number on the tail had the 64 enlarged.
(Geer)



*The commander's aircraft had been repainted into the Ghost scheme when this photograph was taken in 1985. A small **TH** in black had been added to the end of the serial number, and the 64 was enlarged. The pattern on the top of the left wing is revealed in this high angle view of the aircraft.*
(can sau)

The two-seat F-5F made a short appearance with the aggressor squadrons in the early 1980s. F-5F, 83-0072, was photographed in August 1982 with the three digit nose number **072** in red, outlined with yellow. The aircraft was assigned to the 64th AS, and was painted in the Sand scheme.

(can sau)



This F-5F was painted in the Blue scheme and had nose number **73** in red, outlined with yellow.

(can sau)

F-5F, 83-0074, illustrates the Flogger paint scheme. The aircraft had an unusual gray radome when this photograph was taken in October 1983.

(can sau)



This F-5E was photographed on April 16, 1983, and was painted in the Flogger scheme. However, the pattern is slightly different than usually used with this scheme. Notice the red and white bull's head zap from the 84th FIS under the cockpit.

(Rogers)



Painted in the New Lizard scheme, F-5E, 74-1567, was photographed in June 1986. Notice that the camouflage pattern extends onto the radome and is a wraparound scheme.
(can sau)



This right side view of 74-1508 provides a look at the New Lizard paint scheme.
(can sau)

The anodized aluminum paint scheme was still in use by the aggressor squadrons as seen in this 1986 photograph of 74-1541. Notice the addition of the black anti-glare panel extending from the radome to the cockpit.

(can sau)



A different scheme is seen on this F-5E, 74-1528. The aircraft is painted in a dark gray overall, and usual 57th FWW markings are carried on the aircraft.

(can sau)

The two photographs shown at right illustrate the minor variations present in aircraft in the same Blue scheme. Notice the aircraft in the lower photo has the camouflage pattern extending onto the radome. The pattern of the blue under the nose numbers is also slightly different. (can sau)



This right side view of F-5E, 74-1531, provides another look at the pattern of the Blue scheme. (can sau)



A nice landing view of F-5E's, 71-1417 and 74-1537, reveals details of two different patterns. The closer aircraft is in the Flogger scheme, while the other aircraft is in the Blue scheme.

(Whited)



Painted in the Sand scheme, F-5E, 73-0882, is shown on the ramp at Nellis AFB, Nevada, in this late 1985 photograph. (can sau)

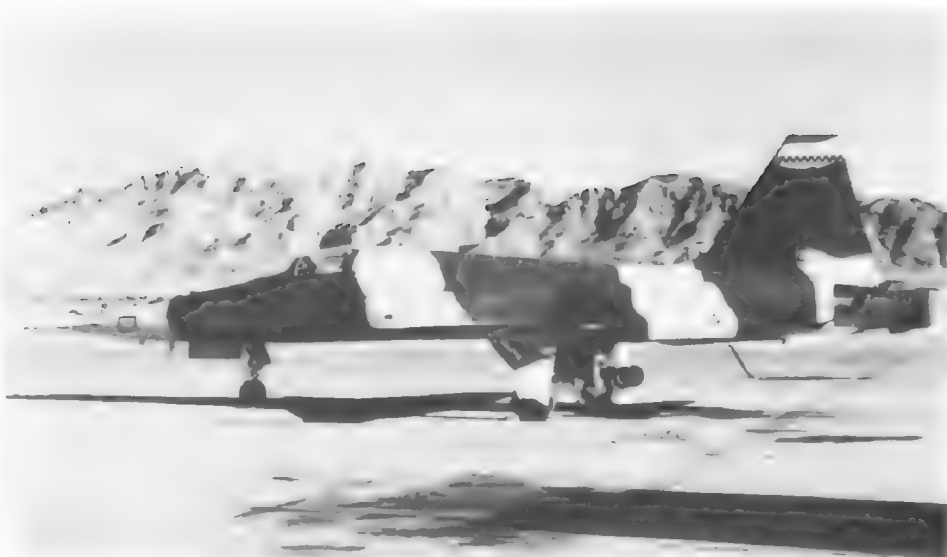


This view of 74-1554 clearly shows the black stenciled markings. The aircraft was painted in a two tone gray scheme with the large number 54 on the nose in red, outlined in yellow. (Whited)



*This F-5E was painted in the New Blue scheme when photographed on September 18, 1987. Notice the **WA** tail code in red, outlined with yellow. The 57th FWW wing badge was the black, low visibility type. (Isham)*

The current markings for the 64th AS were applied to F-5E, 73-0882. The aircraft was in the New Lizard scheme with 82 on the nose in red, outlined with yellow. The **WA** tail code and all other markings were black. (can sau)



F-5E, 73-0847, was photographed at Nellis AFB on January 22, 1987. The aircraft was painted in the Flogger scheme. (Kaston)



The New Blue paint scheme was on 74-1539 when it was photographed on February 8, 1988. The serial numbers were charcoal gray, while the **WA** tail code was painted black. (Isham)

This F-5E had been painted in the New Ghost scheme when photographed in early 1988. The **WA** tail code and the serial number were both painted in the same shade of black. (can sau)



65th AGGRESSOR SQUADRON



*The squadron commander's aircraft for the 65th AS (formerly 65th FWS) was F-5E, 74-1565, when this photograph was taken on August 30, 1985. It was painted in the Blue scheme. Notice the enlarged **65TH** in black on the tail and the nose number **65**, which was dark blue outlined with white.*

(Isham)



The left side of 74-1565 illustrates the pattern of the Blue scheme. This was an earlier photograph than the one seen at the top of the page. Notice that the radome was still painted black.

(can sau)



The "official" Pumpkin scheme is shown again on F-5E, 73-0866, which was photographed in April 1982. (can sau)



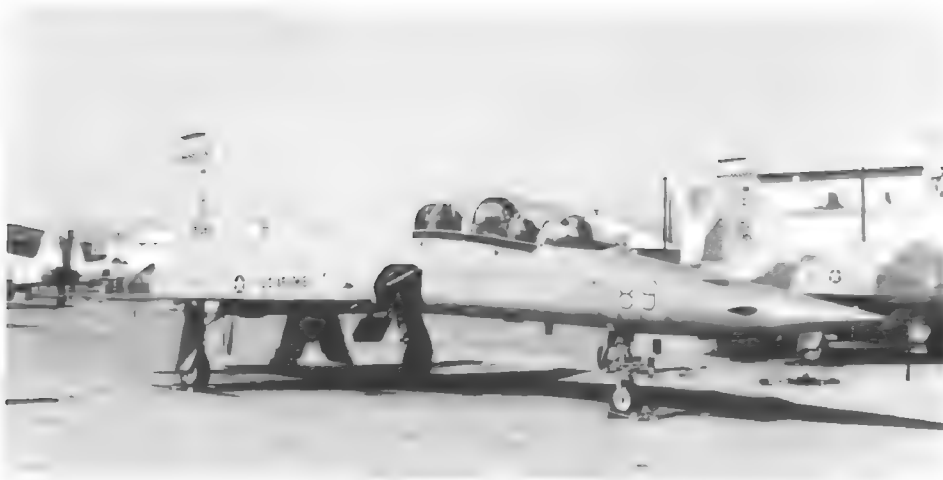
The New Lizard paint scheme is illustrated on F-5E, 73-0846. The aircraft had a blue nose number and a black radome. (can sau)

F-5E, 74-1572, was painted in the Flogger scheme with the nose number 72 in blue, outlined in white. (can sau)



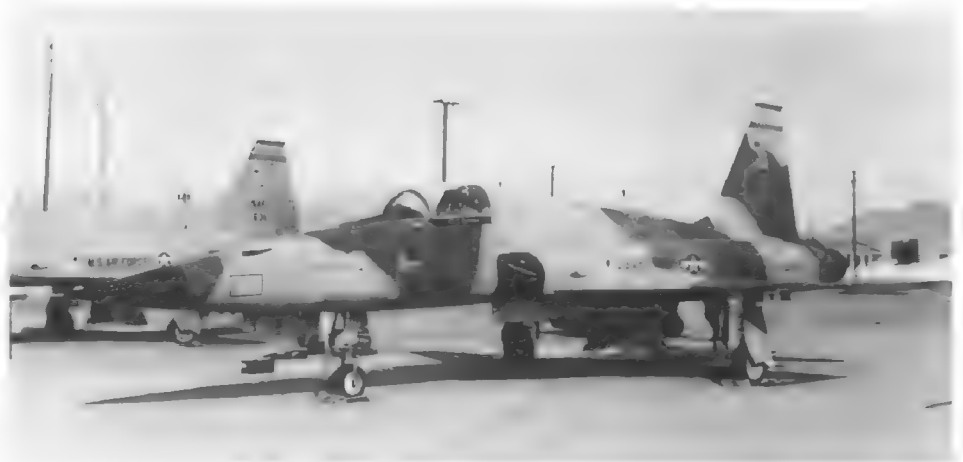
The two-seat F-5F was also assigned to the 65th AS, and one is seen here in a two tone gray paint scheme. The aircraft had nose number 90 in blue, outlined with white. (can sau)





F-5F, 82-0089, was painted in an over-all gray paint scheme. The radome was a slightly lighter gray than the rest of the aircraft. (can sau)

This is an F-5E from the 65th AS in the Flogger paint scheme. (can sau)



A different scheme was painted on F-5E, 73-0885. The aircraft was in ADC gray with dark blue nose numbers, outlined in white. Notice the black anti-glare panel on the aircraft. The style of the serial number 00885 was unusual, being more like that used in ATC than in TAC. (Whited)



This F-5E was in an overall gray scheme with low visibility style markings in black. The enlarged nose number 63 was light blue, outlined in black. Notice the red Soviet star on the nose wheel door. (Whited)



*F-5E, 72-1386, was photographed while in the Blue paint scheme during 1985. The nose number **86** was dark blue, outlined in white. (can sau)*



The New Lizard paint scheme was on F-5E, 72-1403, when it was photographed in March 1985. (can sau)



*This 65th AS F-5E was painted in an overall gray color. Notice the **USAF** and **30855** painted on the tail in black. This is not the typical TAC style for the serial numbers. (can sau)*



F-5E, 72-1403, was in the New Ghost paint scheme when it was photographed on March 13, 1985. (can sau)

A nice view of F-5E, 74-1572, shows the wraparound Flogger paint scheme. (Whited)



An unusual paint scheme was on F-5E, 74-1530, which was photographed on January 22, 1987. The colors are similar to those used on the Sand scheme; however, the camouflage pattern is different. (Kaston)



F-5E, 73-0885, was painted in a variation of the Sand scheme. The aircraft was photographed at Nellis AFB on January 22, 1987. (Kaston)

This 65th AS F-5E was painted in the New Ghost scheme when seen at Nellis AFB on April 9, 1987. (Kaston)



F-5E, 74-1546, displays the Blue paint scheme at Nellis AFB in mid-1985.

(can sau)

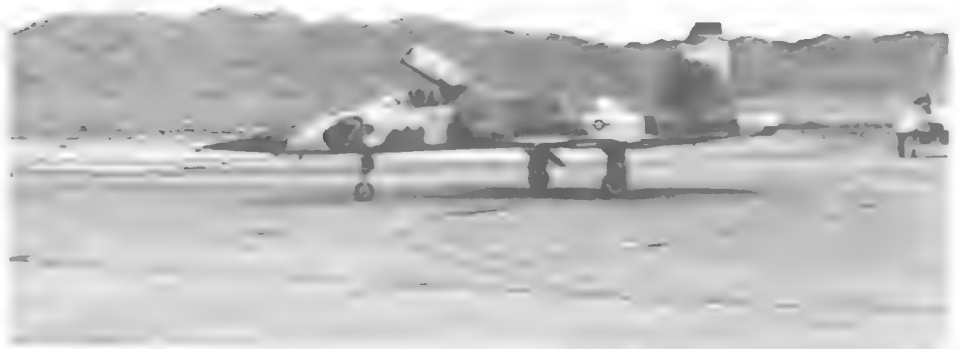


*The New Blue paint scheme had been applied to 72-1386 when this photograph was taken. Both the **WA** tail code and the **86** nose number were painted in dark blue and outlined with a pale yellow.*

(can sau)

*F-5E, 74-1571, was taxiing out for a flight at Nellis AFB when photographed in December 1987. The **WA** tail code was black, and the aircraft was painted in the New Blue scheme.*

(Geer)



*Another F-5E that was painted in the New Blue scheme was 72-1404. This photograph is dated February 1988. All markings were the black low-visibility style. The **04** nose number was blue, outlined in pale yellow.*

(Isham)



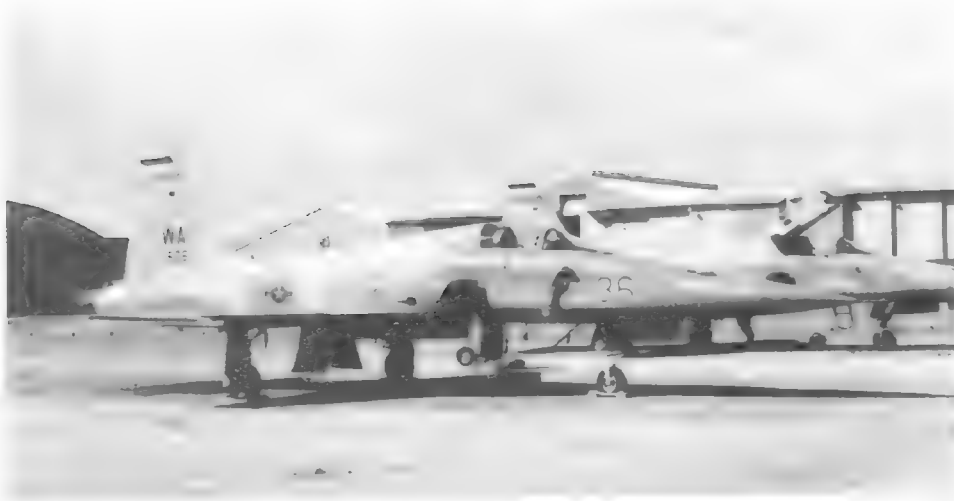
The Flogger paint scheme is shown here on 74-1571. The 71 nose number is dark blue, outlined in white.

(can sau)

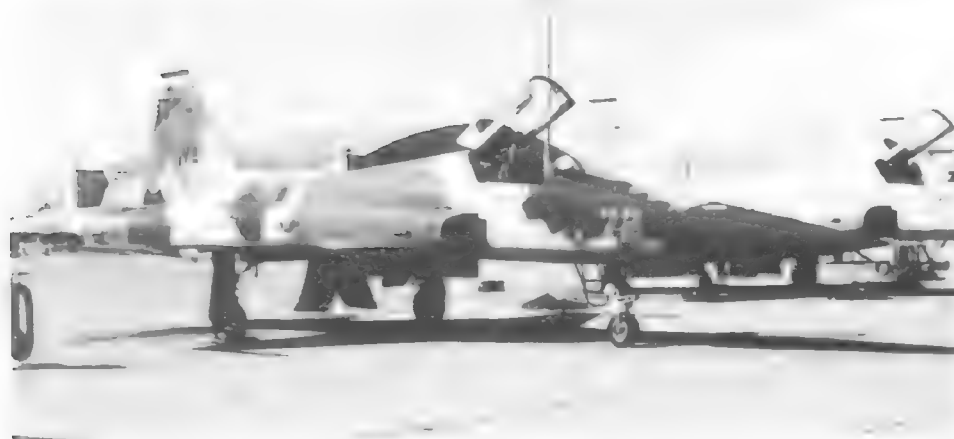


F-5E, 74-1536, was painted in the New Ghost scheme when photographed at Nellis AFB. Except for the nose number, the only color was the yellow and black checkered band on the tail.

(can sau)



The right side of 74-1536 provides a look at the camouflage pattern on the other side of the aircraft. (Isham)



The Flogger scheme was painted on F-5E, 74-1572. The 72 nose number was a dark blue, outlined with pale yellow. (Isham)

57th FWW COMMANDER'S AIRCRAFT

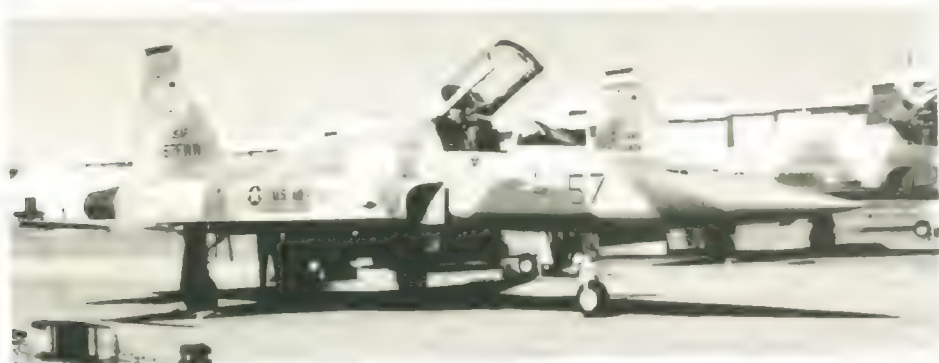
The 57th FWW commander's aircraft was F-5E, 74-1557. The aircraft is seen here in the Blue paint scheme. The 57 nose number was red, outlined in yellow.

(can sau)



The same aircraft, 74-1557, is seen in this January 30, 1982, photograph. Notice that the 57 nose number is still red, but now is outlined in black. A gray/green has replaced blue, 35164, in the pattern.

(Daniels)



The commander's aircraft was repainted in the New Blue scheme as seen in this April 9, 1987, photograph. Notice the enlarged 57FWW painted on the tail in black. The colorful TAC badge is on the tail.

(Kaston)

The left side of 74-1557 is seen in this photograph. Barely noticeable is the small, black, low visibility TAC badge on the tail and the 57th FWW crest on the fuselage. Note the addition of the WA tail code. The aircraft remains in the New Blue scheme.

(Kaston)



527th AGGRESSOR SQUADRON



The 527th Aggressor Squadron, formerly the 527th TFTAS (Tactical Fighter Training Aggressor Squadron), is based at Alconbury, England, to provide aggressor support for Europe. They have the opportunity to fly simulated combat against not only the USAF forces, but also against many different aircraft from allied European nations. Here, two of the 527th's F-5Es are shown flying in formation with an RF-4C. The aggressor aircraft are painted in the VNAF pattern, with colors similar to those used for the Snake scheme. (Cole)



The Grape paint scheme is illustrated on 74-1534, and it was photographed at RAF Alconbury, England, home base for the 527th. (MAP)

The 527th also had aircraft painted in the Snake scheme as seen here.

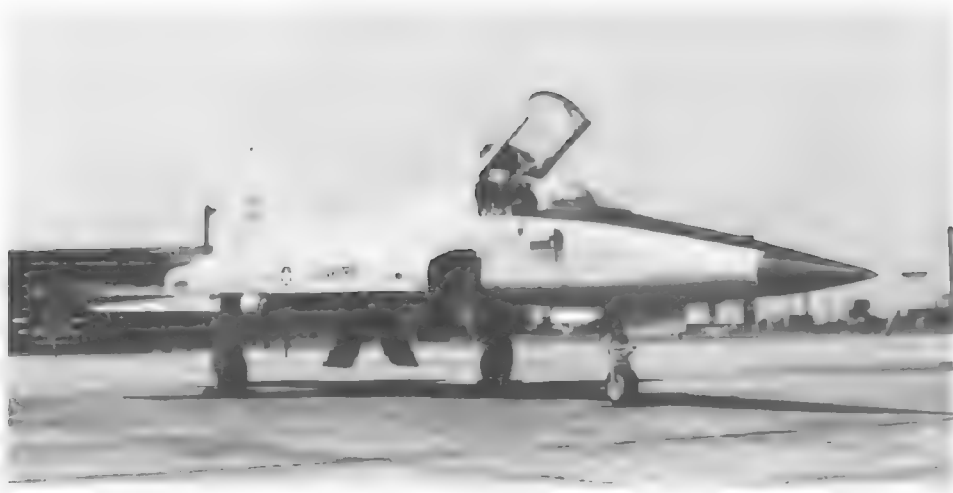
(MAP)



F-5E, 74-1544, belonged to the 527th TFTAS when this photograph was taken in July 1976. All of their aircraft were delivered in basic aggressor schemes without unit markings.

(MAP)





F-5E, 74-1549, was painted in the anodized aluminum scheme when it was photographed in July 1976. No markings for the 527th TFTAS had yet been applied to the aircraft. (MAP)

F-5E, 74-1544, was photographed in April 1978 while taxiing out for takeoff. The aircraft was in the Ghost scheme and had a black 44 nose number, outlined in yellow. (Wilderdijk)



The Grape paint scheme was on F-5E, 74-1534, when photographed at Spangdahlem, West Germany, in June 1977. (Zastrow)



F-5E, 74-1548, was photographed as it taxied out to the runway. The aircraft was painted in the anodized aluminum scheme and had 48 on the nose in black, outlined with yellow. (MAP)



F-5E, 74-1535, is seen taxiing out for a flight in this June 1979 photograph. Notice the addition of the squadron badge to the tail.
(Van Balen)

This photograph of F-5E, 74-1532, was taken in November 1978. The aircraft was in the Grape paint scheme and had the squadron badge on the tail.
(MAP)



F-5E, 74-1553, was painted in the Snake scheme. The aircraft was photographed at Bitburg, West Germany, in July 1979.
(Zastrow via Geer)

F-5E, 74-1556, was painted in the Lizard scheme when it was photographed taxiing out for a flight. The 56 on the nose was black, outlined in yellow.
(Hohn via Whited)



The Snake paint scheme was used on 74-1551. The aircraft was photographed at Bitburg, West Germany, on July 13, 1981.
(Wijngaarden via Linn)

Photographed in June 19, 1982, F-5E, 74-1545, was painted in the Ghost scheme.
(MAP)



F-5E, 74-1543, was photographed at the 17th Air Force Loading Competition at Sembach AB, West Germany. The aircraft was painted in the Ghost scheme and had the low visibility black stencil style markings. The 43 on the nose was red, outlined with yellow, and the pilot's name was yellow on a red rectangle. (Cole)



An interesting overall gray scheme was painted on 74-1559. Notice the nose number 59, which was a pale blue, outlined in black. (van Broekhuizen)



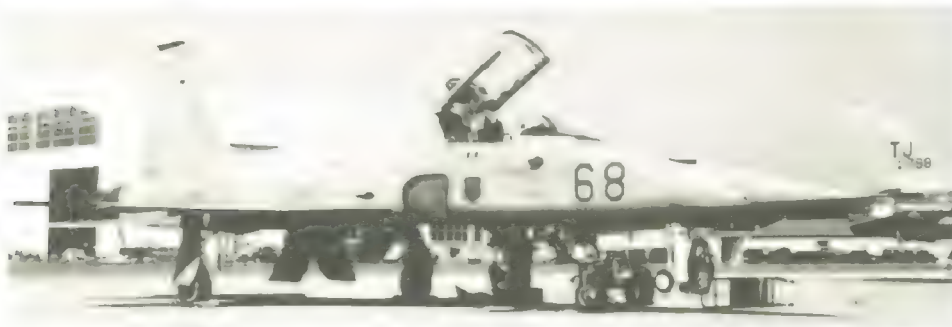
Taxiing out for a flight is F-5E, 74-1545. The aircraft is in a two tone gray paint scheme with 45 on the nose in red, outlined with yellow. (van Broekhuizen)



F-5E, 74-1535, was painted in the New Blue scheme when photographed in April 1985. The Soviet style red star was on the nose gear door, and the 35 nose number was black, outlined in yellow. The crew chief's name was red on a gold background. (Whited)



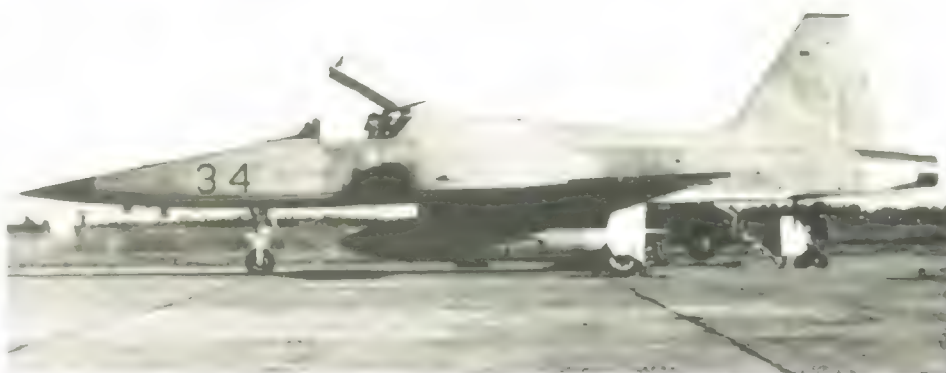
A 527th AS F-5E in a gray paint scheme is seen in this November 1985 photograph. Notice the squadron badge and DFC unit award under the cockpit. The Soviet style red star was on the nose gear door. A large 63 was painted on the nose in pale blue, outlined in black. (Wilson via McGarry)



F-5E, 74-1568, has the nose number 68 in red, outlined with yellow in this photograph. The aircraft was painted in the Ghost scheme.

(Wilson via McGarry)

This left side view of 74-1534 provides a look at the Ghost pattern that was painted on that side of the aircraft. The nose number 34 was red, outlined in yellow. (Stewart)



This nice photograph of F-5E, 74-1534, illustrates the right side of the aircraft and the Ghost paint scheme.

(Stewart)

26th AGGRESSOR SQUADRON



*Aggressor support in the Pacific is the responsibility of the 26th Aggressor Squadron which is based at Clark AFB in the Philippines. One of their early T-38As, 65-10443, is shown here landing at Kadena AB, Japan, in August 1976.
(Tokunaga via Isham)*



*A Lizard paint scheme was used on T-38A, 65-10406, when photographed at Clark AB, Philippines, on February 9, 1978. The number 06 was in red, outlined with yellow.
(Tokunaga via Isham)*

*T-38A, 65-10400, was painted in a three tone gray scheme in this photograph that is also dated February 9, 1978.
(Tokunaga via Isham)*





Grape colors in a Non-Standard pattern were used on T-38A, 65-10365. The aircraft was photographed at Davis-Monthan AFB, Arizona, on August 4, 1978.

(Knowles via Isham)

T-38A, 65-10441, was also at Davis-Monthan AFB, Arizona, in August 1978. The aircraft was in the Snake scheme.

(Knowles via Isham)



This in-flight photograph of F-5E, 74-1574, provides a nice view of the pattern of the Grape scheme. The nose number 74 was red, outlined in yellow.

(USAF via Isham)

Two F-5Es of the 26th AS are shown here as they taxied out for a mission during "Cope Thunder" at Clark AB. The closest F-5E was in the Blue scheme, and the distant one was in Ghost.

(USAF via Isham)





F-5E, 74-1561, was photographed on November 13, 1978, and was painted in the Lizard scheme.

(Greve)



Photographed at Osan AB, South Korea, F-5E, 74-1575, is taxiing for a flight. The aircraft was in the Grape paint scheme when this photograph was taken.

(Zorn via Minert)

The left side of 74-1575 was photographed on November 14, 1982. The aircraft is now painted in a variation of the Blue scheme.

(can sau)





*The 26th AS commander's aircraft was photographed on August 12, 1982, and was painted anodized aluminum.
(McGarry)*

*This F-5E was painted in the Snake scheme, and is shown here at Clark AB on August 12, 1982.
(McGarry)*



100
101



*The Blue scheme was painted on this F-5E when photographed in April 1984.
(Meinert)*

*The same F-5E seen above, 74-1575, has a different scheme applied in this February 1987 photograph. The colors are similar to those used for the Blue scheme; however, the pattern is completely different.
(Flightleader)*



F-5E, 74-1561, was painted in an unusual gray and green paint scheme. The nose number 61 was red, outlined with yellow. (Flightleader)



A left rear view of 74-1561 gives a look at the pattern of the camouflage on the rear of the aircraft. (Flightleader)



Another unusual paint scheme appeared on this F-5E belonging to the 26th AS. The pattern of two greens and sand was different from any official pattern. (Flightleader)



**THE FOLLOWING OUTSTANDING VOLUMES IN THE COLORS & MARKINGS SERIES
AND THE DETAIL & SCALE SERIES ARE AVAILABLE FROM TAB BOOKS INC.**

COLORS & MARKINGS SERIES

- | | |
|----------------|---|
| Book No. 24525 | Vol. 1, Colors & Markings of the F-106 Delta Dart |
| Book No. 24526 | Vol. 2, Colors & Markings of the F-14 Tomcat, Part 1 (Atlantic Fleet Squadrons) |
| Book No. 24527 | Vol. 3, Colors & Markings of the F-4C Phantom II, Part 1 (Post Vietnam Markings, 1974-1984) |
| Book No. 24528 | Vol. 4, Colors & Markings of the F-4D Phantom II, Part I (Post Vietnam Markings) |
| Book No. 24529 | Vol. 5, Colors & Markings of the A-6 Intruder, (U.S. Navy Bomber & Tanker Versions) |
| Book No. 24530 | Vol. 6, Colors & Markings of the U.S. Navy Adversary Aircraft (Includes the Aircraft of TOP GUN) |
| Book No. 24531 | Vol. 7, Colors & Markings of Special-Purpose, C-130 Hercules |
| Book No. 24532 | Vol. 8, Colors & Markings of the F-14 Tomcat, Part 2 (Pacific Fleet Squadrons) |
| Book No. 24533 | Vol. 9, Colors & Markings of the A-7E Corsair II (USN Atlantic Fleet Squadrons—Post Vietnam Markings) |
| Book No. 24534 | Vol. 10, Colors & Markings of U.S. Navy CAG Aircraft, Part I (Fighters, F-8, F-4, F-14) |
| Book No. 24535 | Vol. 11, Colors & Markings of U.S.A.F. Aggressor Squadrons |

DETAIL & SCALE SERIES

- | | |
|----------------|---|
| Book No. 25012 | Vol. 2, B-17 Flying Fortress, Part I (Production Versions) |
| Book No. 25013 | Vol. 3, F-16 Fighting Falcon (Models A & B) |
| Book No. 25014 | Vol. 4, F-111 Aardvark (The Aircraft That Bombed Libya) |
| Book No. 25015 | Vol. 5, F-5E & F Tiger II (USAF & USN Aggressor Aircraft) |
| Book No. 25016 | Vol. 6, F-18 Hornet (Developmental & Early Production Versions) |
| Book No. 25017 | Vol. 7, F-4 Phantom II, Part 2 (USAF F-4E & F-4G) |
| Book No. 25020 | Vol. 8, F-105 Thunderchief (Covers all Fighter—Bomber and Wild Weasel Versions) |
| Book No. 25018 | Vol. 9, F-14A Tomcat (Su-22 Killer) |
| Book No. 25019 | Vol. 10, B-29 Superfortress, Part I (Production Versions) |
| Book No. 25021 | Vol. 11, B-17 Flying Fortress, Part 2 (Derivatives) |
| Book No. 25022 | Vol. 12, F-4 Phantom II Part 3 (USN & USMC) |
| Book No. 25027 | Vol. 13, F-106 Delta Dart (Ultimate Interceptor) |
| Book No. 25028 | Vol. 14, F-15 Eagle (2nd Edition) |
| Book No. 25025 | Vol. 15, F9F Panther (First Navy Jet to See Combat) |
| Book No. 25024 | Vol. 16, F9F Cougar (Grumman's First Swept Wing Fighter) |
| Book No. 25026 | Vol. 17, F11F Tiger (U.S. Navy's First Supersonic Fighter) |
| Book No. 25023 | Vol. 18, B-47 Stratojet (Production Versions) |
| Book No. 25030 | Vol. 19, A-10 Warthog (The Tank Killer) |
| Book No. 25029 | Vol. 20, B-17 Flying Fortress, Part 3 (More Derivatives) |
| Book No. 25031 | Vol. 21, F-101 Voodoo (2nd Edition) |
| Book No. 25032 | Vol. 22, A-7 Corsair II (2nd Edition) |
| Book No. 25033 | Vol. 23, Boeing 707 and AWACS |
| Book No. 25034 | Vol. 24, A-6 Intruder, Part 1 (Bomber & Tanker Versions) |
| Book No. 25035 | Vol. 25, B-29 Superfortress, Part 2 (Derivatives) |
| Book No. 25036 | Vol. 26, F6F Hellcat (The U.S. Navy's Most Important Fighter in World War II) |
| Book No. 25037 | Vol. 27, B-52 Stratofortress (Covers all Versions) |
| Book No. 25038 | Vol. 28, AV-8 Harrier, Part I (USMC Versions) |
| Book No. 25039 | Vol. 29, U.S.S. Lexington (CV-16 to AVT-16) |
| Book No. 25040 | Vol. 30, F4F Wildcat (Grumman's First "Cat" Fighter) |
| Book No. 25041 | Vol. 31, F-8 Crusader (Covers All Fighter & Reconnaissance Versions) |

See the Detail & Scale Series and Colors & Markings Series at your local Hobby Shops and Book Stores.

**If not available in your area or for more information on the Detail & Scale and Colors & Markings Series books,
send for our FREE TAB catalog. OR ORDER TOLL-FREE TODAY: 1-800-233-1128.**

TAB TAB BOOKS Inc.

Blue Ridge Summit, PA 17294-0850



172E

UK ISBN 1-85310-611-9
USA ISBN 0-8306-8535-9